DOCUMENT RESUME

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IDENTIFIERS *California Assessment Program

ABSTRACT

Designed to accompany a slide series called "Understanding Your Grade 3 California Assessment Program (CAP) Report," this package is the second in a series that has been produced in conjunction with the new third grade test. The slide series describes the contents of the Survey of Basic Skills report that contains respective school's scores. It has 78 frames and is 20 minutes in length. This packet contains the narrative for the slide series, and the test manual for "Interpreting and Using Results." CAP scores are used to compare a school's basic skills program with other schools and to assess program strengths and weaknesses. A suggested procedure for utilizing CAP results is included. (KM)

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California Assessment Program

Suggestions for Using the Slide Series "Understanding Your Grade 3 CAP Report"

SPECIAL NOTE FOR MEETING COORDINATOR: Provide attendees with copies of the Survey of Basic Skills: Grade 3 report (at least Parts I & II) before the slide series starts. Call the California Assessment Program at (916) 322-2200 if you have any questions.

The Second in a Series

The enclosed slide series "Understanding Your 3rd Grade CAP Report," describes the contents of the Survey report that contains your school scores. It has 78 frames and is 20 minutes in length.

This is the second slide series that has been produced in conjunction with the new third grade test. The first one, "An Overview of CAP's New Test for Grade 3," was released last spring, and describes the test development process and the new test. (While it provides a useful overview of the new test, it is not a prerequisite for the second series. If you would like to view it also, it can be obtained from CAP.)

Enclosures

Your package contains a film strip or slide tray, and audio cassette (which can be used with automatic advance equipment if desired), and a copy of the slide series narrative.

Information on Use and Suggestions for Improvement

Use the attached sheet to tell us how many people viewed the slide series and the nature of the audience. We would also appreciate any comments you might have for improving future productions of this nature.

Return When Finished

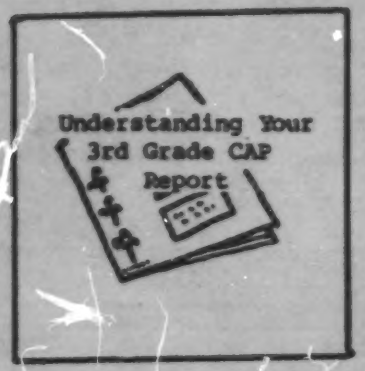
Please return the slide series and the attached sheet to CAP when you have completed your showings.

California Assessment Program
State Department of Education
721 Capitol Mall, 4th Floor
Sacramento, CA 95814
(916) 322-2200

California Assessment Program

UNDERSTANDING YOUR 3RD GRADE CAP REPORT
(SLIDE SERIES NARRATIVE)

SPECIAL NOTE FOR MEETING COORDINATOR: Provide attendees with copies of the report (at least Parts I & II) before the slide series starts. Call the California Assessment Program at (916) 322-2200 if you have any questions.

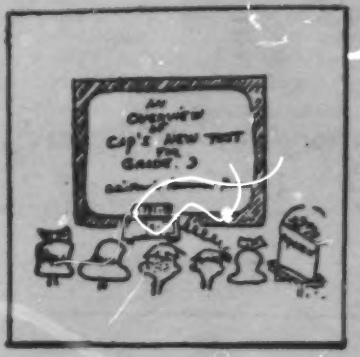


1

The purpose of this slide series is to acquaint you with your new report for the Survey of Basic Skills: Grade 3.

2

Because the Survey report is new and much more comprehensive, staff of the California Assessment Program developed this slide series to help you understand its contents.

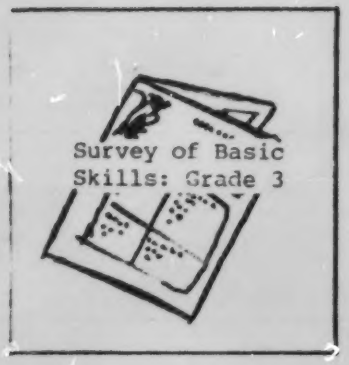


3

Let's quickly review some facts about the new test. You may have already seen the slide series entitled "An Overview of CAP's New Test for Grade 3." If not, it can be borrowed from the California Assessment Program. While it provides a useful overview of the new test, it is not a prerequisite for this slide series.

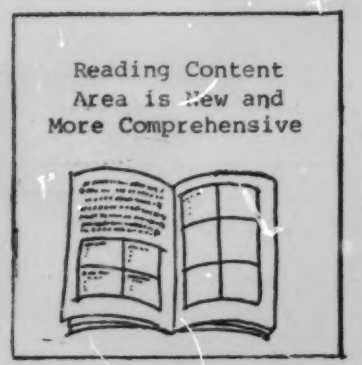
4

The new test had its beginnings in 1978 when legislation was passed that required assessment in reading, written language, and mathematics of all third grade students in California.



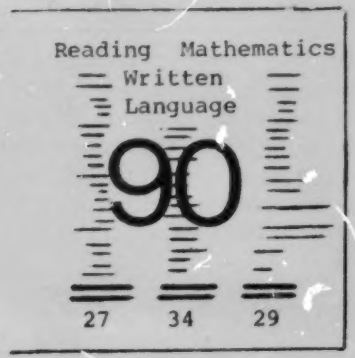
5

In response to the legislative mandate, the California Assessment Program, in cooperation with school personnel throughout the state, developed the Survey of Basic Skills: Grade 3. This test replaced the former Reading Test which assessed only one content area.



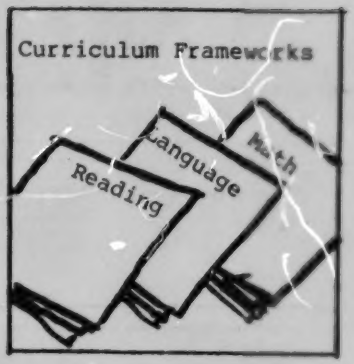
6

Not only does the new test have the additional content areas of written language and mathematics, but the reading content area is new and more comprehensive as well.



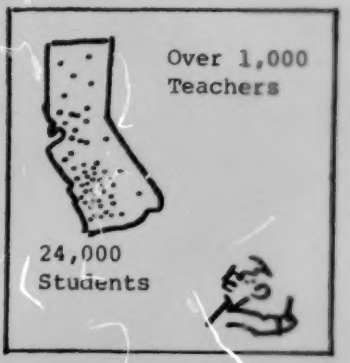
7

The new test will provide a great deal of information about your basic skills program. There are overall scores for reading, written language, and mathematics, and 90 additional scores within the three content areas.



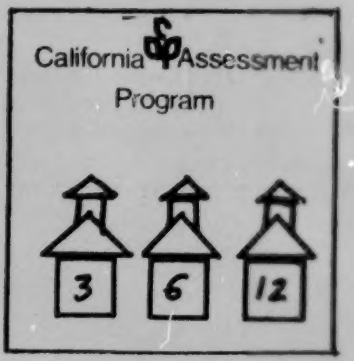
8

Ensuring a match between the new test and California's basic skills curriculum was of paramount concern to everyone associated with the test development process. The curriculum frameworks provided a guiding philosophy for the creation of test content specifications and assessment items.



9

Over 1000 teachers and other educators from over 300 California school districts reviewed test specifications and questions, and 24,000 third grade students participated in the field testing.

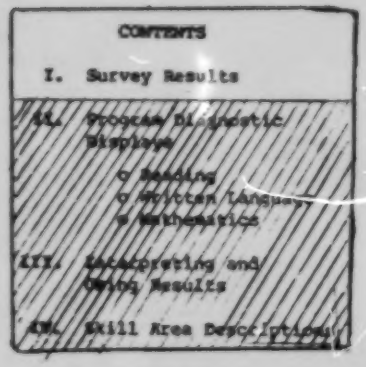


10

The basic skills of reading, written language, and mathematics are now assessed in grades 3, 6, and 12 by the California Assessment Program.

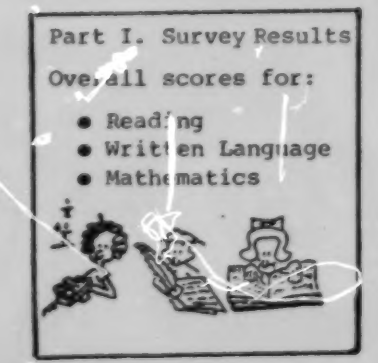
11

Now let's get to the topic of central concern to this presentation--the report that contains your school scores. We'll look at each section very quickly, and then go back for a more detailed review.



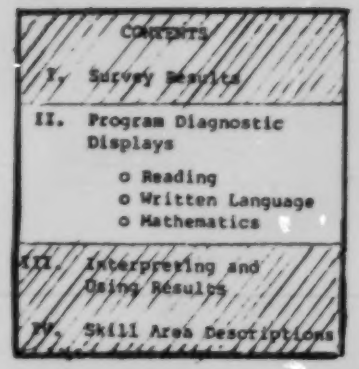
12

The first part of the report, "Survey Results" contains overall scores.



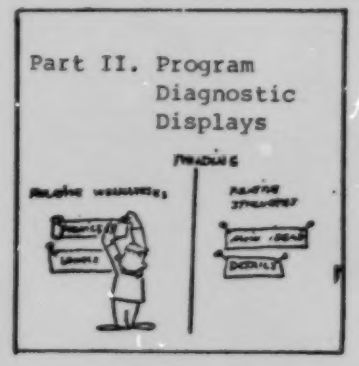
13

Here you will find overall scores for reading, written language, and mathematics.



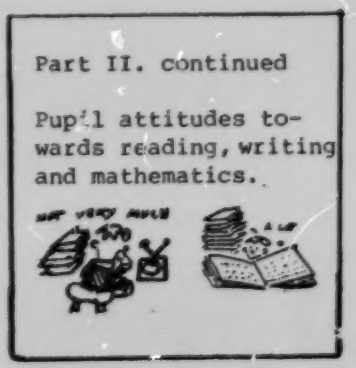
14

Part II, "Program Diagnostic Displays," contains an analysis of the specific skill areas in reading, written language, and mathematics.



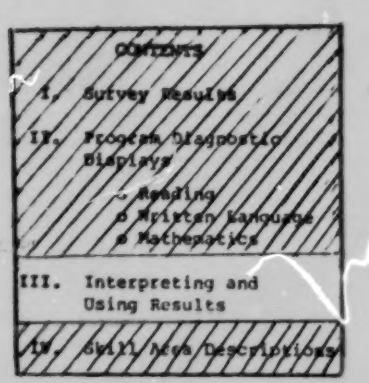
15

The displays will be of special interest to persons concerned with improvement of the basic skills program.



16

At the end of Part II you will find a separate section on how pupils responded to questions about their attitudes toward reading, writing and mathematics.

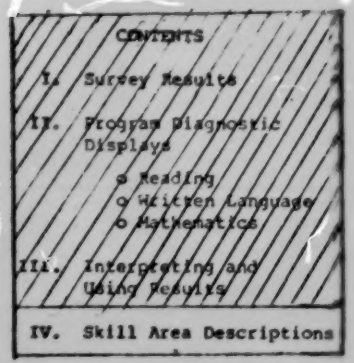


17

Part III, "Interpreting and Using Results," has additional intepretive information and lookup tables.

18

It also contains a process for analyzing your results that leads to a plan of action. The process can be accomplished individually or in small groups.

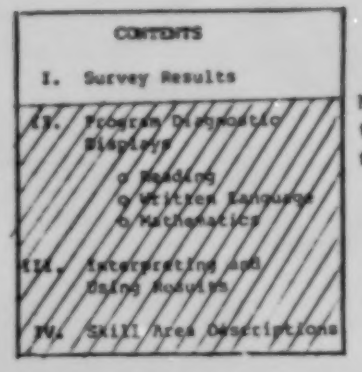


19

Part IV of the report, "Skill Area Descriptions," has definitions and illustrations of the skills displayed in Part II.

20

This information is especially useful when reviewing skill area results in the Program Diagnostic Displays that will be described in a few minutes.



21

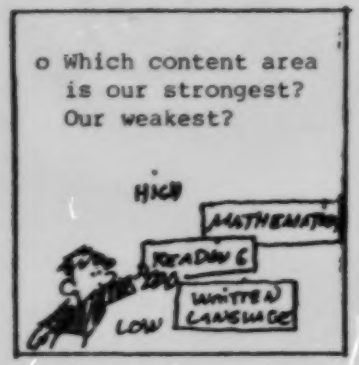
Now let's take a closer look at the first part of the Report that contains the survey results.

22

Information in Part I will assist you in answering many questions about your school's basic skills program.

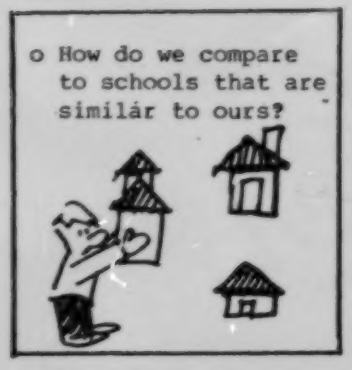
23

For example, it will describe your trend in reading scores since 1978.



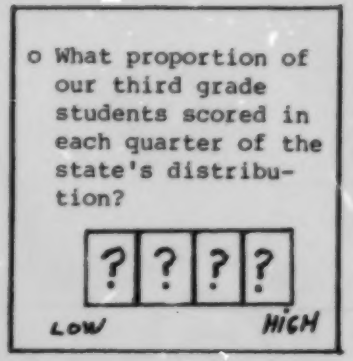
24

It will allow you to make comparisons among the three content areas. Is your math program stronger than the reading program?



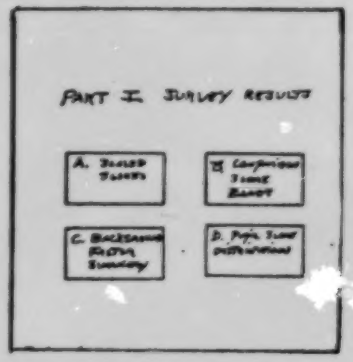
25

And you can compare your performance in each content area to schools that are similar to yours.



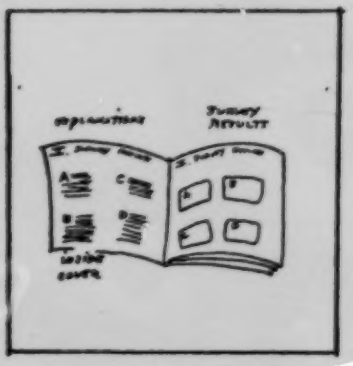
26

It will also tell you what proportion of your students scored in each quarter of the state's distribution for each content area.



27

Part I has four blocks of information lettered A through D.

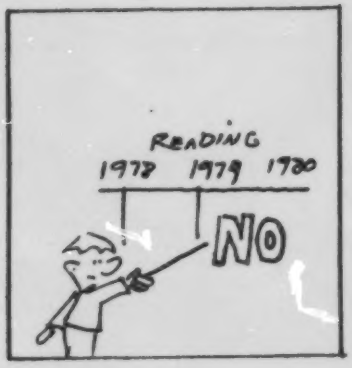


28

Each reporting block is explained on the inside front cover of the report.

29

While percent correct scores have been a part of past grade 3 reports, they do not appear in the new Survey report for the following reasons:

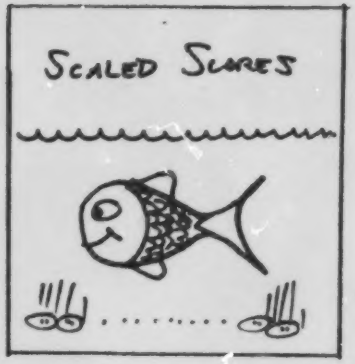


30

Percent correct scores could not be compared to last year's results because a new test was introduced in 1979-80.

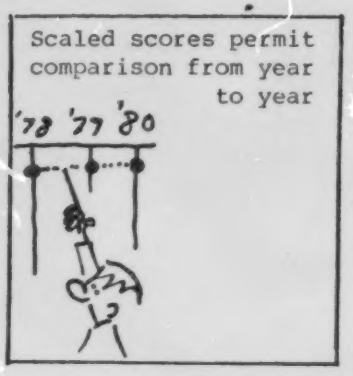
31

Furthermore, percent correct scores can not be used to compare performance between content areas.



32

A new score has been introduced in this year's report called the scaled score.

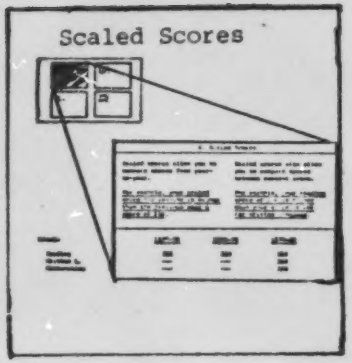


33

Scaled scores will permit comparisons from year to year.

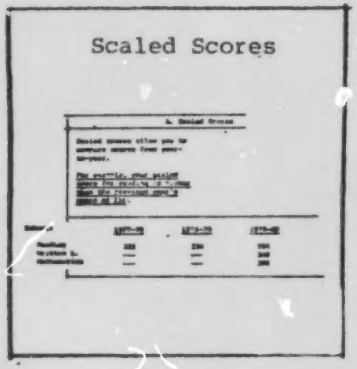
34

And they permit comparisons among content areas.



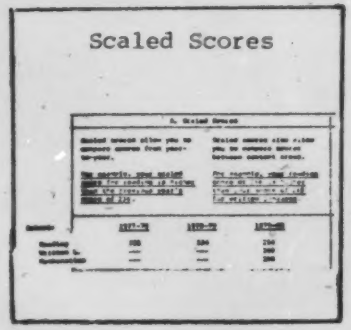
35

Scaled scores appear in Block A on page 1 of the report.



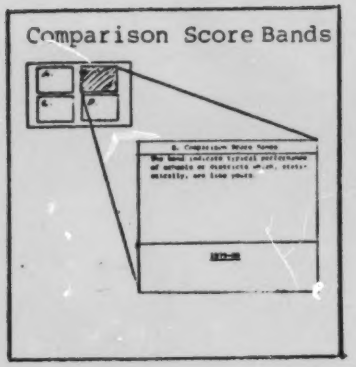
36

The first part of Block A allows you to compare scores from year-to-year. You will see a computer-generated statement that compares this year's score to the previous year. This example says your scaled score for reading is higher than the previous year's score of 234.



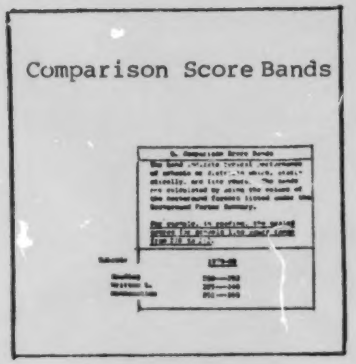
37

The second part allows you to make comparisons among content areas. For example, this computer-generated statement compares your score in reading to written language.



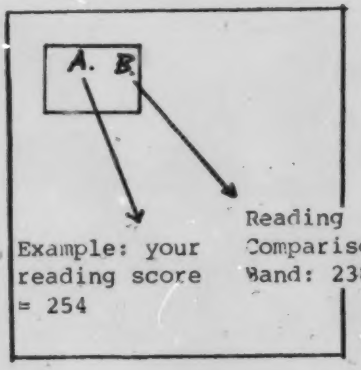
38

The next block of information, Block B, Comparison Score Bands, contains a range of numbers for each content area. These are scores of schools that, statistically, are like yours.



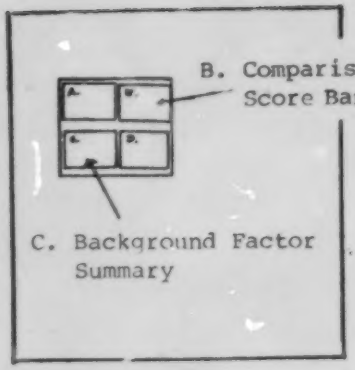
39

Block B also contains a computer-generated statement about your reading Comparison Score Band.



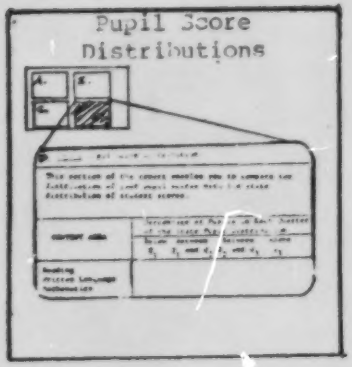
40

If your score is above the comparison score band for a content area, it means that your students are achieving better than students in schools that are similar to yours. In this example, the school reading score is above the Comparison Score Band for similar schools.



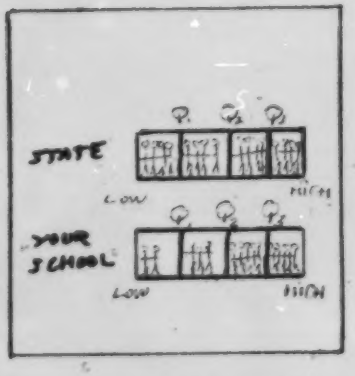
41

The Comparison Score Bands were calculated for your school by using the values of the background factors listed in Block C.



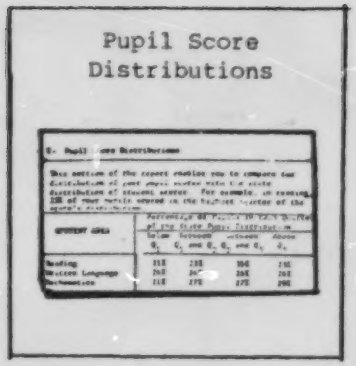
42

The last block of information on page 1--Pupil Score Distributions--enables you to compare the distribution of your pupil's scores with the state distribution of scores. Each quarter of the state distribution contains 25% of the pupils.



43

If your school population "mirrored" the state distribution of pupils, you would have pupils distributed equally in each quarter. In this example the school has higher proportions of pupils in the upper quarters.



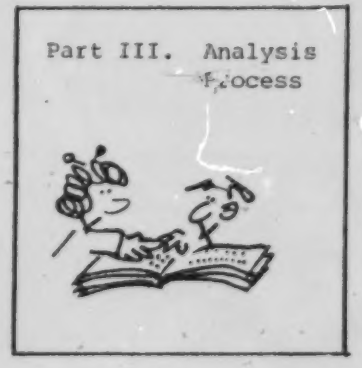
44

As in the other reporting blocks, there is a computer-generated statement about the results for your school. In this example, 28% of a school's pupils scored in the highest quarter of the state distribution of scores.

- o Scaled Scores
- o Comparison Score Band
- o Background Factor Summary
- o Pupil Score Distributions

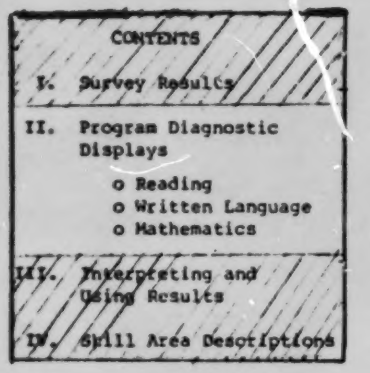
45

We have quickly reviewed the four major components of Part I of the report.



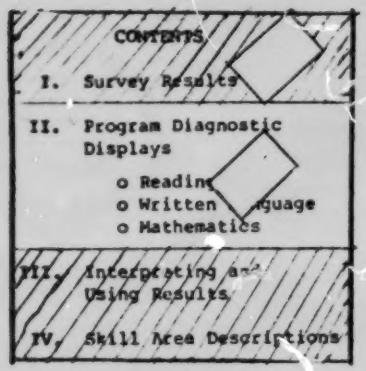
46

And we listed a few of the questions that Part I can answer about your basic skills program. The analysis process in Part III will assist you in providing answers for questions like these from your school results.



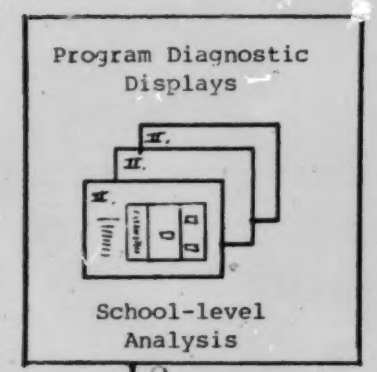
47

Part II of the report contains Program Diagnostic Displays. You will recall that Part I dealt primarily with overall scores and external comparisons to the state and other schools and districts.



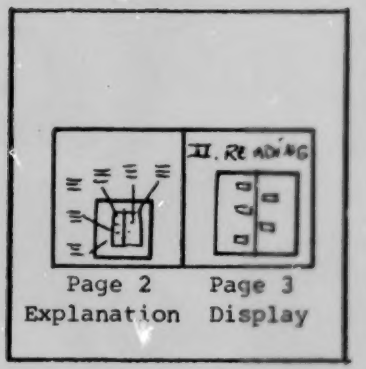
48

Part II on the other hand is concerned with an internal analysis of specific skill areas in reading, written language, and mathematics.



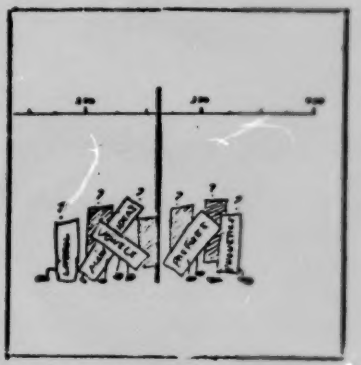
49

There are separate, school-level Program Diagnostic Displays for each content area.



50

Page 2 explains every component of the displays.

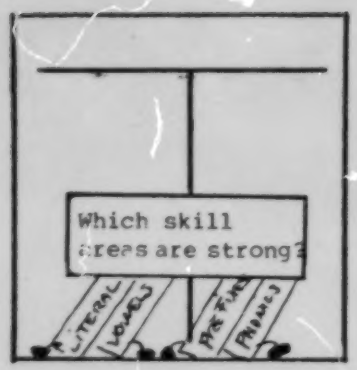


51

The displays will help you determine how skill areas stand in relation to the total score for a content area. They can answer questions such as these:

52

Which skill areas in my reading program are <u>weak</u> compared to my total score for reading?

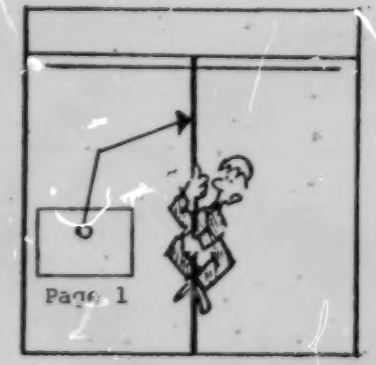


53

Which skill areas are strong compared to the total score for reading?

54

The total score for a content area is shown graphically on each Program Diagnostic Display as a vertical line.



55

On page 1 of the report your score for a content area was a number. Here it is expressed as a vertical line.

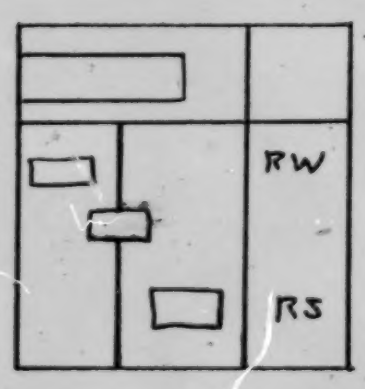
56

If a skill area falls above or to the right of the total score for a content area, it is identified as a relative strength.

If the skill area falls below or to the left of the total score, it is identified as a relative weakness.

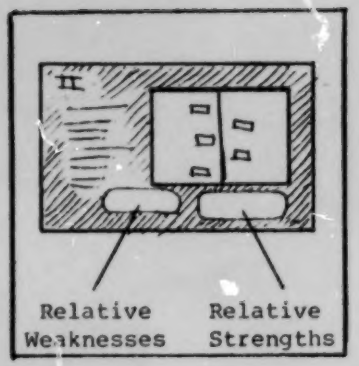
57

If the skill area overlaps the total score for a content area, it is neither a relative strength nor a weakness.



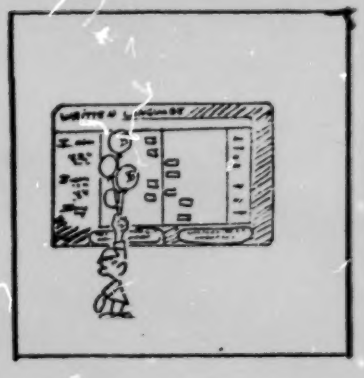
58

The relative strengths and weaknesses are also listed in the far right-hand column of each display. RW means relative weakness and RS means relative strength.



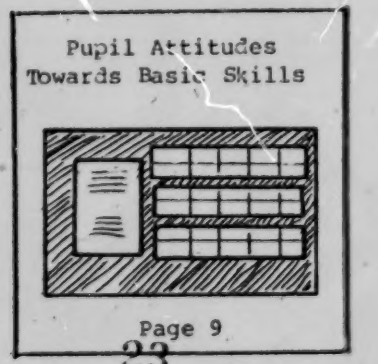
59

Relative strengths and weaknesses are summarized in narrative form at the bottom of each display.



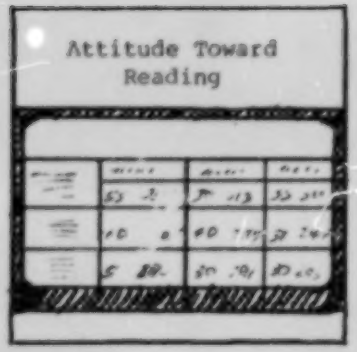
60

The Program Diagnostic Displays can be useful even if the numerical data are not shown. As long as you understand the location of the total score for a content area and the three kinds of skill area bars, you can still identify possible strengths and weaknesses.



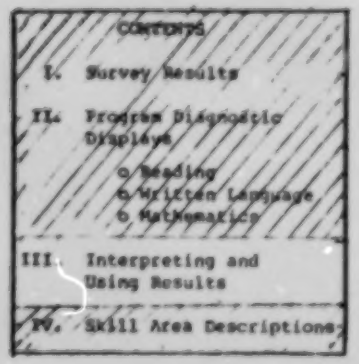
61

The last section of Part II begins on page 9. It will show how your students responded to attitudinal questions related to reading, writing, and mathematics.



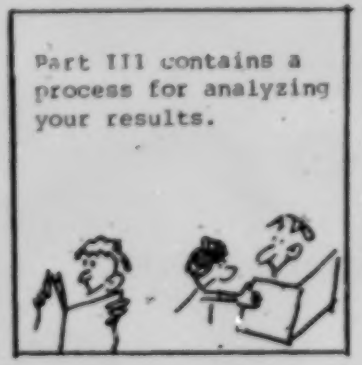
62

For example, you can compare the school percentage of students who reported that they like to read "very much" to the state percentage.



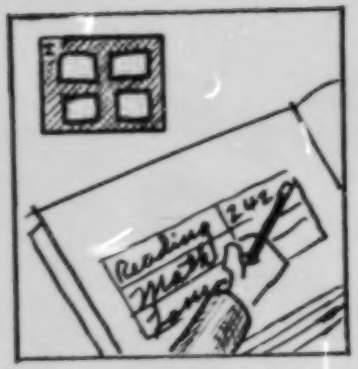
63

The conclusion of this slide series will briefly highlight Part III of the report. As previously mentioned, this section contains a process for analyzing your results.



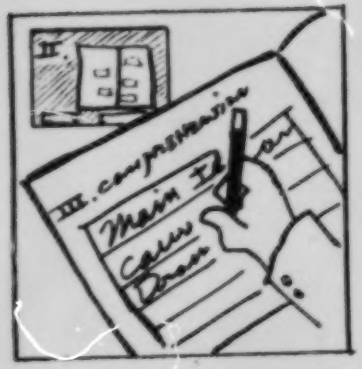
64

It can be accomplished individually or in small groups.



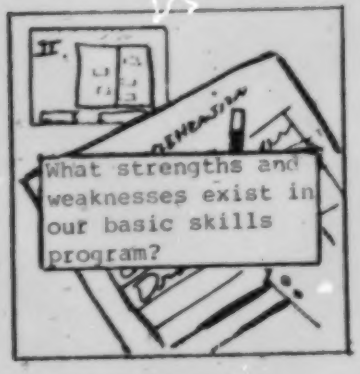
65

The analysis process will take you through a step-by-step examination of your results. You will be able to make a careful comparison of content area performance based on the information in Part I of the report.



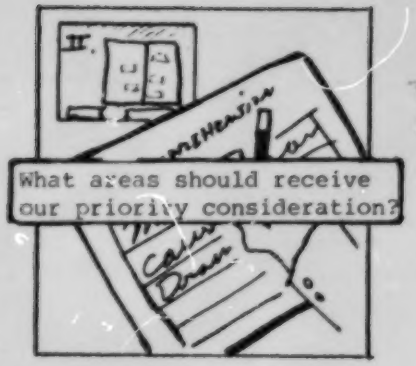
66

And it will help you analyze the information contained in the Program Diagnostic Displays. The process will help you answer questions such as these:



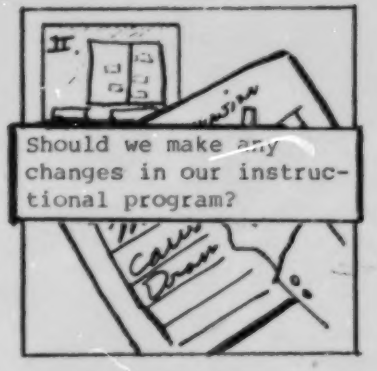
67

What strengths and weaknesses exist in our basic skills program?



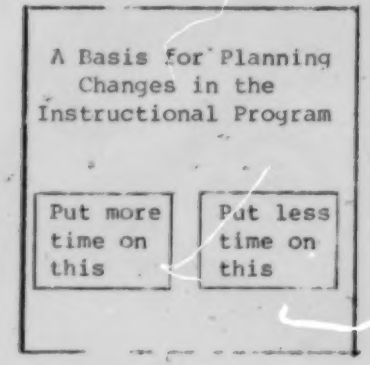
68

What areas should receive our priority consideration?



69

Should we make any changes in our instructional program?



70

The analysis process will help provide a basis for planning changes in the instructional program.

71

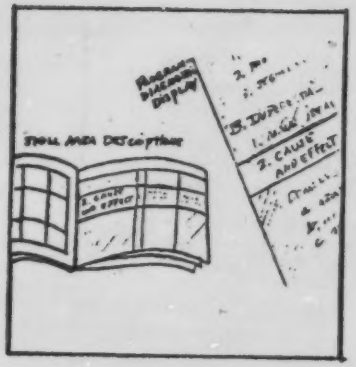
In addition to the analysis process, Part III has lookup tables so you can compare your school and district results to other schools and districts.

72

And Part III has a list of helpful resource documents.

73

We mentioned earlier that Part IV of the report contains skill area descriptions.



74

Each skill area is defined and illustrated in Part IV. This section will insure an understanding of how each skill area is defined and measured.

75

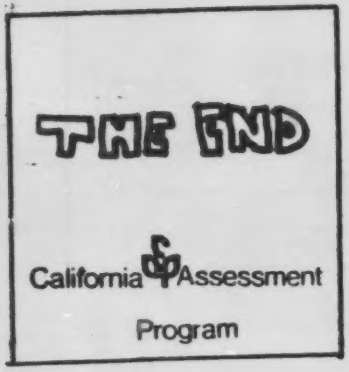
We are almost at the end of this slide series; however, this is only an introduction to your school report. You now need to review and discuss your own results.

76

Congratulations on surviving the introduction! You are now ready to deal with your school report!

77

(No narration)



78

(No narration)

California Assessment Program
Office of Program Evaluation and Research
California Department of Education
721 Capitol Mall
Sacramento, CA 95814

Survey of Basic Skills: Grade 3 — 1980 Part III

INTERPRETING AND USING RESULTS

FULL REPORT

Part I Survey Results

Part II Program Diagnostic Displays

Part III Interpreting and Using Results

Part IV Skill Area Descriptions

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California Assessment Program

Suggested Procedures for Using CAP Results

PURPOSE

One fundamental purpose underlying the development of the *Survey of Basic Skills: Grade 3* was that the information yielded from the assessment results be as helpful as possible to school personnel in evaluating and improving their instructional programs. That purpose is accomplished only to the degree that the CAP results are analyzed carefully, interpreted in the light of local priorities, other information, and sound professional judgment, and used to strengthen instructional programs. It is to this end that "Part III Interpreting and Using Results" has been designed and organized.

Listed below are steps central to the process of using CAP results which you may wish to incorporate into your ongoing program improvement activities. This section of the report is organized around these key steps so that an overall plan of action is not obscured by the details of analysis. Special work sheets have been provided for your convenience in analyzing the results. These are followed by some questions to explore with staff.

The second section, entitled "Interpreting *Survey* Scores," includes a discussion of scaled scores, percentile ranks, comparison score bands, background factors, and pupil score distributions.

Part III concludes with a number of conversion tables. The first two tables provide percentile rank equivalents of scaled scores and background factors (Table 1 for schools, Table 2 for districts). The other three tables provide the link between the percentage of items answered correctly for each skill area and scaled scores (Tables 3, 4, and 5 are for reading, written language, and mathematics, respectively).

A FOUR-STEP PROCEDURE

The procedure below assumes that one person (or a very small group of persons) will analyze the results and draw tentative conclusions before involving teachers, curriculum specialists, and others in discussing the conclusions, analyzing the test content in the light of curriculum, and planning strategies for program improvement.

Step 1. *Overall Content Area Analysis.* Analyze overall results and draw conclusions (see Step 1, page 13).

Step 2. *Specific Skill Area Analysis.* Analyze skill area results and draw conclusions (see Step 2, page 14).

Step 3. *Teacher validation of results.* Present results to teachers and explore tentative conclusions in the light of the instructional program and other information (see Step 3, page 15).

Step 4. *Plan of Action.* If areas of weakness are detected, introduce strategies to strengthen instructional program (see Step 4, page 16).

Step 1. *Overall Content Area Analysis*

Review 1979-80 CAP results for grade 3 and note the organization of the new reporting booklet. Analyze CAP data including such information as the following:

- Content area comparisons
- Relationship to comparison score bands
- Year-to-year trends in reading
- Pupil score distributions
- Pupils' attitudes toward the basic skills

Content area comparisons

You may find it useful to compare your pupils' relative performance in the content areas. Use your scaled scores to rank order the three content areas from highest to lowest (see Block A on page 1 of your report).

Content Area	Scaled Score
_____ (highest)	_____
_____	_____
_____ (lowest)	_____

Relationship to comparison score bands

To compare your school's performance to that of schools with similar background characteristics, write "above" if your scaled score is above the comparison score band, "below" if below and "within" if within (see Block B on page 1 of your report).

Relationship to comparison score band (above, below, or within)

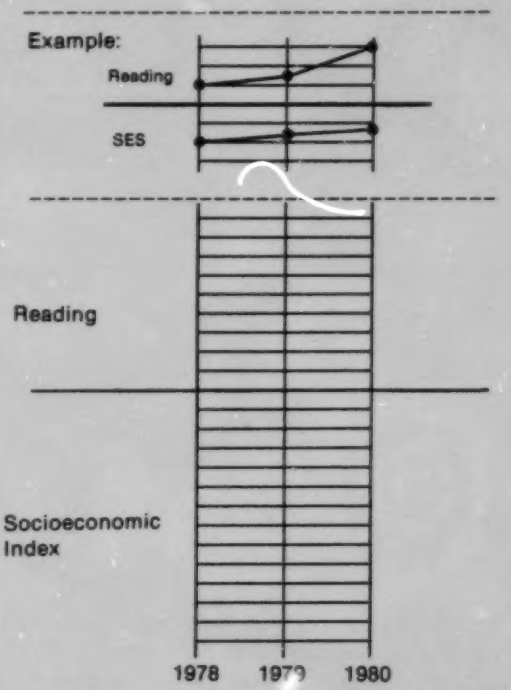
_____

_____

_____

Trends

In the upper half of the box below, chart your school's year-to-year pattern in reading. It may also be helpful to examine year-to-year changes in reading in light of any changes occurring in your socioeconomic index for the same years in the lower half of the box as in the example below.



Draw tentative conclusions

Now that you have seen three pieces of information you may be ready to make some tentative conclusions about broad programmatic strengths and weaknesses. Some other questions you may wish to consider are noted below:

- Do other sources of information support your conclusions?
- Do the pupil score distributions reveal any unusual patterns?
- How positive are your pupils' attitudes toward the basic skills? (See page 9 of your school report.)

Step 2. *Specific Skill Area Analysis*

List what appear to be important skill area strengths and weaknesses in reading, written language, and mathematics.* Examine the Program Diagnostic Displays (pages 3, 5, and 7 of your report) to determine what skills are identified as relative strengths or relative weaknesses. Be sure to keep in mind such questions as the following:

- How strong or weak is the overall content area of reading? Written language? Mathematics?
- What percentage of questions in the identified skill areas are being correctly answered by your third-grade pupils? (See Tables 3, 4, and 5.)
- Is the skill area bar very far from the total score? For example, if the skill area bar is to the left of but almost touching the vertical line (representing the total score), then that skill area is probably just a little weaker than the overall score.
- Do previous CAP results, other test results, writing assessment results, or additional sources of information suggest similar patterns of strength and weakness?

Reading

Potential Weaknesses

Potential Strengths

Written Language

Potential Weaknesses

Potential Strengths

Mathematics

Potential Weaknesses

Potential Strengths

*The *Survey* results are subdivided into many skill areas (90) for reading, mathematics, and written language in order to provide useful program-diagnostic information at very specific levels. This approach is not meant to deny the holistic nature of the reading and writing processes or the interrelatedness of the various skills, but merely to imply that skill area findings can be useful in examining the impact of a total language arts or mathematics program.

Step 3. *Teacher Validation of Results*

Present results to teachers (not just third-grade teachers) and explore tentative conclusions in light of the instructional program and their students. The analysis might be approached with questions such as the following:

1. How are the identified skill areas defined and tested? (See Part IV of this report.)

2. Are these skills part of our curriculum?

3. What priority do we give these skills?

4. Do the strengths and weaknesses identified by CAP agree with our knowledge of and experience with that group of third graders?

5. Do our CAP findings corroborate other objective information from district-adopted proficiency tests, criterion-referenced tests, or norm-referenced tests?

6. Does information from sources such as actual student writing or other in-school performance support the findings of the results from various objective tests?

What might be some explanations for the apparent weaknesses?

1. Do we allocate enough instructional time to the skills we value? Are we providing enough quality time in which students are actively involved?

2. Are the instructional materials we use interesting, challenging, and appropriate in difficulty and content?

3. Are we using the best possible instructional methods? Are students motivated and given opportunities for creativity?

4. Do our students experience sufficient success in skill areas of our concern?

5. Is the articulation from grade to grade sufficient in our instructional programs?

6. Is some particular subpopulation (such as students new to our school) contributing most to the weaknesses? (The Subgroup Report should help answer this question.)

Step 4. *Plan of Action*

A. Following are some considerations in devising strategies to improve the instructional program:

1. Are we going to concentrate on remedying the weak areas in grades 2 and 3 only? Or are we going to focus our attention on our current fourth graders as well? (After all, they are the ones who exhibited those weaknesses.)
2. Can we do a better job in the weak areas without sacrificing performance in some other skill? Are there some skill areas which are strong but which are possibly less important where we could buy some time?

B. After the staff has agreed upon what areas need attention, devise strategies for improving performance in those skill areas. These might take the following form:

1. We need to follow more closely the sequence of our textbook series so we get to the higher level skills.
2. We need to have a united school effort and avoid ever saying to pupils such things as "spelling isn't important" or "spelling doesn't count."
3. We need to concentrate on maintenance of arithmetic skills.

C. Set goals and have a means to evaluate them. Goals could take the following form:

1. Our scaled score in fractions will increase by 10 scaled score points while our overall mathematics score will increase by 5 scaled score points.
2. Next year no more than 25 percent of our pupils will score below Q_1 in reading.
3. Next year we will be within or above our comparison score bands in all three content areas.

RESOURCE MATERIALS

Following is a list of resource publications available from the State Department of Education which may prove helpful in analyzing your instructional program.

Publications may be ordered at the listed cost, plus 6% sales tax for California purchasers, from the following address:

California State Department of Education
P.O. Box 271
Sacramento, CA 95802

Code	Title (date of publication)	Price
CAP Publications		
SR9141	Survey of Basic Skills: Grade 3 — Rationale and Content (1980)	$1.50
N.A.	Student Achievement in California Schools: 1979-80 Annual Report (1980)	$1.25
Reading		
CR2096	Reading for the Elementary and Secondary Schools, Framework in (1973)	$1.25
CC9206	Catalog of Instructional Materials in Reading (1980)	$3.00
SK8167	Handbook for Planning an Effective Reading Program (1979)	$1.50
SK5256	Guidelines: Towards Excellence in Reading Programs (1978)	$1.50
SK6095	Five Successes: Analysis of Success Factors in Title III Reading Projects (1977)	$ .85
Written Language		
CE5031	English Language Framework for California Public Schools (1976)	$1.50
SK5257	Improving Writing in California Schools: Problems and Solutions (1980)*	$2.00
CC9221	Catalog of Instructional Materials in Spelling and Handwriting (1980)	$1.60
Mathematics		
CM4065	Mathematics Framework for California Public Schools (1975)	$1.25
CM4053	Mathematics Scope and Sequence Charts (1975)**	$1.25
SM5033	Plan for Improving Elementary Mathematics Programs (1976)	$1.25
SM4017	In-service Guide for Teaching Measurement: The SI Metric System (1975)	$1.25
SM1114	Directory of Exemplary Mathematics Programs in California (1973)	$ .85
General		
SR6016	California School Effectiveness Study (1977)	$ .85
SR9019	Report of Selected ECE Schools' Increasing, Decreasing Reading Scores (1980)	$1.50

*Please inquire before ordering.
**Issued as a supplement to the Mathematics Framework.

Interpreting *Survey* Scores

PERCENT CORRECT SCORES

For several years the chief vehicle for reporting the CAP results to schools and districts at the third-grade level has been the percent correct score. (Percent correct is obtained by dividing the total number of questions answered correctly by the total number of questions attempted.) The percent correct score was useful in that it allowed school personnel to assess their results by comparing their scores with those of previous years. Unfortunately, percent correct scores do not lend themselves very well to other kinds of comparisons such as comparing a school's performance in reading to that in math, or the school's performance in one skill area such as "alphabetizing" to another such as "inferential comprehension."

Such comparisons are not possible because some skills are inherently more difficult than others. Statewide pupil performance in some skills will range in the 50-60 percent correct bracket while pupils will nearly master other skills. Therefore, getting 70 percent of the alphabetizing items correct is not equivalent to getting 70 percent of the "inferential comprehension" items correct.

Furthermore, the California Assessment Program tests were expressly designed to measure the wide array of skills taught in a good instructional program rather than to make an easy test by focusing on simple skills or an extremely difficult test by covering only the complex or advanced skills. Statewide advisory committees designated the proportion of the test to be devoted to the various skill areas on the basis of their importance, rather than their relative easiness or difficulty. Therefore, there is no reason to expect a 70 percent correct score in reading to be equal to a 70 percent correct score in math; or a 65 percent correct on the third-grade math test to equal a 65 percent correct on the sixth-grade math test.

Finally, when a test is changed, as in third-grade reading, one cannot directly compare the percent correct scores. Since the new test is more difficult, nearly all schools will have a lower score for 1979-80, simply because it is a different, harder test — not because the students can't read as well.

SCALED SCORES

To eliminate problems of noncomparability among skill areas, among content areas, and between different tests, CAP has introduced a scaled score reporting system. No absolute minimum or maximum scaled score exists, but almost all schools will have a score between 100 and 400. This score, in contrast to percent correct, has several advantages, most notably the following:

- One can compare performance across the years (in spite of different tests).
- One can compare performance across content areas.
- One can compare performance across skill areas.

Number of Pupils Tested NES TOTAL Three content areas were tested in the new *Survey of Basic Skills: Grade 3*	**A. Scaled Scores** Scaled scores allow you to compare scores from year-to-year.		Scaled scores also allow you to compare scores between content areas.
School Reading Written Language Mathematics	1977-78	1978-79	1979-80
District Reading Written Language Mathematics	1977-78	1978-79	1979-80

Comparison of 1979-80 Reading Scores to Those of Previous Years

One useful feature of the new scaled score is that it allows comparison of reading scores on the 1979-80 *Survey of Basic Skills: Grade 3* with the *Reading Test* which was formerly administered.* Thus a school can look at its progress by plotting the scaled scores in reading for 1977-78, 1978-79, and 1979-80. The scale is designed to be useful for many years to come, regardless of the number of test changes that might be made over a long period of time. Finally, the scale is not subject to change based on the performance of the state as a whole, that is, it is not re-normed or adjusted in any way. A school can monitor its progress independent of the amount of progress made by other schools.

Comparisons Among Content Areas

Another advantage of a scaled score is that, unlike a raw score (which a percent correct is), such a standard score allows comparison of a school's performance in reading to that in written language or in mathematics.

*This linkage is possible because pupils in a sample of schools took both tests for the equating study conducted in spring of 1980.

Comparisons Among Skill Areas

Scaled scores also play a vital role in permitting comparison of performance among the different skill areas in reading or written language or mathematics as in the Program Diagnostic Displays on pages 3, 5, and 7 of each school report. The feature that makes scaled scores superior to many other scores for those comparisons is that there is no maximum value (or artificial ceiling) or minimum value (artificial floor). That is, a truly high-scoring school that has a scaled score in reading of 400 could conceivably have a scaled score of maybe 430 in alphabetizing which would show superior performance in that skill area and be recognized as a relative strength in reading. A finite scale, with a minimum and maximum, masks such exceptional performance at either end of the scale.

Although the pitfalls of using percent correct scores have been pointed out, they do have one principal advantage: They represent a simple statistic which concretely describes how pupils performed on the test. Sometimes such information might be useful in setting priorities about which skill areas should receive attention. Tables 3, 4, and 5 provide conversions between scaled scores and percent correct scores to provide the reader with such information.

Example: A school has scaled scores of 200 in both the skill areas of "addition" and "applications of multiplication." Both are identified as relative weaknesses on the Program Diagnostic Display for Mathematics. Table 5 shows that a scaled score of 200 for addition corresponds to 75 percent correct and 200 for applications of multiplication corresponds to 38 percent correct. Such knowledge might be useful in deciding what actions one should take regarding the mathematics program.

PERCENTILE RANKS

Although scaled scores have many positive features and uses as outlined above, they do not answer some of the more common questions evaluators ask about a test score. When confronted with a school with a scaled score of, say, 280 in reading, many will continue to ask such questions as:

- What is the average score?
- How does this school rank?
- What is the maximum score?

The scaled score alone does not answer these questions, or their variants. Thus, a table has been constructed which ranks the scaled scores of schools in California. (Table 1 ranks school scores; Table 2 ranks district scores.)

Using Table 1, the evaluator can discover that the answers to the above three questions are as follows.

- The average school (i.e., median school, the one at the 50th percentile) had a scaled score in reading of 256.
- Our school (at 280) ranks at the 73rd percentile, that is, 73 percent of the schools in California had lower scaled scores in reading in 1979-80 than our school.
- The highest scaled score in reading was 414.

Percentile ranks raise a number of issues among educators and other users. A brief treatment of two of these may be useful in explaining your local testing results.

School Percentile Ranks and Pupil Percentile Ranks. Questions sometimes arise when a school's percentile score as reported by the California Assessment Program differs from its percentile score on a publisher's standardized test, even though both tests were administered to the same pupils. A typical question might be stated this way:

> "At our school, we gave a commercially prepared, nationally normed test. Looking in the publisher's norm charts, we found that the score of our average (usually median) pupil was at the 39th percentile, but our school's California Assessment Program score was at the 17th percentile. Why do we get different results for CAP and for our own testing program?"

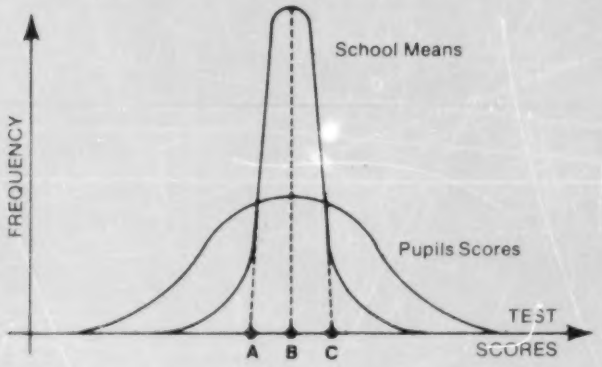
Several factors might account for the apparent discrepancy, such as variations in content assessed by the two tests. However, such variations are not likely to result in major differences in percentiles. In most cases, the differences result from the fact that the CAP percentile ranks are based on the distribution of school scores, and published tests' percentile ranks are based upon a distribution of pupil scores. Individual pupils should be compared with other pupils and schools should be compared with other schools. When considering the test results for groups, such as schools and districts, it is appropriate to use group percentile ranks. The American Psychological Association's *Standards for Educational and Psychological Tests** clearly states that " . . . it is inappropriate to evaluate schools by using norms developed for the evaluation of individuals."

*Frederick B. Davis, Chair of a joint committee of the American Psychological Association, American Educational Research Association, and the National Council of Measurement in Education, Standards for Educational and Psychological Tests. Washington, D.C.: American Psychological Association, 1974.

The difference between the two percentile ranks can be explained by a brief look at statistics. School scores (means) tend to be closer to the overall mean than do the scores of individual pupils. This is because school scores themselves are aggregates and aggregates of scores are less varied than individual pupil scores. Figure 1 illustrates a distribution of pupil scores and school mean scores. Pupil scores are spread across a wider range of possible scores because there is a greater variability among actual scores. But school scores are more clustered near the mean. Thus, the same score will convert to a different percentile rank depending on whether it compared with pupil or school norms.

Figure 1 shows, for example, that a percentile rank of 39 based upon pupil norms is equivalent to a percentile rank of 17 based on a distribution of school mean scores. Thus, we can see that the two different percentile ranks, 39 and 17, represent the same level of pupil achievement reported on different scales.

An equating study has been conducted which will provide equivalency tables for school and pupil norms. (The results of this study were not available in time for inclusion in this document.) These tables will enable easy conversion of selected test publishers' pupil norms into comparable CAP school norms. The use of these tables will allow you to compare the results of your testing with the results of the CAP test.



Publisher's Pupil Percentile Rank	39	49	81
State School Percentile Rank	17	30	89

Figure 1. Comparison of pupil and school percentile ranks based upon two hypothetical distributions

Annually Computed Percentile Ranks. This question is sometimes asked by California testing directors:

> "Why does the California Assessment Program calculate and publish new percentile rank norms each year rather than using fixed norms?"

Current year norms enable you to answer the question, "How did the achievement of pupils in our school compare with the achievement of pupils in other schools in California this year?" Achievement in the current year is being evaluated, not the achievement this year compared to the achievement of all schools in California two or three years ago. While norms do not change dramatically from year to year, the norms developed for the current year of testing are the correct ones to use.

The current-year norms used by the state are sometimes contrasted with the norms that publishers may use for as long as ten years. Commercial test publishers are not able to revise their norms each year because of the cost of doing so and the near impossibility of obtaining a representative sample each year.

Percentile ranks are designed for status comparisons. The question about whether the pupils in the third grade this year are achieving at a higher or lower level in reading than in previous years can be answered by looking at the scaled scores.

TABLE 1 — SCHOOL NORMS — MAY 1980 (N = 4564) —

State Percentile Ranks	Reading	Written Language	Mathematics	Entry Level Test	Socio-economic Index	Percent AFDC	Percent LES/NES Pupils	State Percentile Ranks
99	339 –414	332 –410	338 –398	31.66–34.00	2.96–3.00	59.0–92.2	52.7–97.9	99
98	330 –338	323 –331	330 –337	31.31–31.65	2.93–2.95	52.4–58.9	43.7–52.6	98
97	325 –329	319 –322	324 –329	31.04–31.30	2.89–2.92	46.2–52.3	38.8–43.6	97
96	320 –324	315 –318	319 –323	30.93–31.03	2.85–2.88	43.0–46.1	34.0–38.7	96
95	317 –319	312 –314	314 –318	30.82–30.92	2.82–2.84	39.3–42.9	31.1–33.9	95
94	314 –316	308 –311	310 –313	30.70–30.81	2.78–2.81	36.4–39.2	28.9–31.0	94
93	311 –313	306 –307	308 –309	30.60–30.69	2.76–2.77	33.6–36.3	26.8–28.8	93
92	308 –310	302 –305	305 –307	30.47–30.59	2.74–2.75	31.5–33.5	24.7–26.7	92
91	306 –307	300 –301	303 –304	30.37–30.46	2.72–2.73	30.3–31.4	22.9–24.6	91
90	304 –305	299	301 –302	30.29–30.36	2.70–2.71	28.9–30.2	21.6–22.8	90
89	302 –303	297 –298	300	30.21–30.28	2.68–2.69	27.8–28.8	20.1–21.5	89
88	300 –301	295 –296	298 –299	30.13–30.20	2.65–2.67	26.7–27.7	19.2–20.0	88
87	298 –299	293 –294	296 –297	30.08–30.12	2.63–2.64	25.6–26.6	18.3–19.1	87
86	296 –297	292	294 –295	30.01–30.07	2.62	24.8–25.5	17.2–18.2	86
85	295	291	292 –293	29.97–30.00	2.59–2.61	24.1–24.7	16.2–17.1	85
84	294	289 –290	291	29.90–29.96	2.58	23.2–24.0	15.0–16.1	84
83	292 –293	288	289 –290	29.84–29.89	2.57	22.3–23.1	14.3–14.9	83
82	290 –291	287	288	29.78–29.83	2.55–2.56	21.6–22.2	13.6–14.2	82
81	289	286	286 –287	29.72–29.77	2.54	20.7–21.5	12.9–13.5	81
80	288	284 –285	285	29.65–29.71	2.52–2.53	20.2–20.6	12.2–12.8	80
79	287	283	284	29.60–29.64	2.51	19.7–20.1	11.7–12.1	79
78	285 –286	282	282 –283	29.54–29.59	2.49–2.50	19.0–19.6	11.1–11.6	78
77	284	281	281	29.47–29.53	2.48	18.5–18.9	10.4–11.0	77
76	283	280	280	29.41–29.46	2.46–2.47	18.1–18.4	9.9–10.3	76
75	282	278 –279	279	29.34–29.40	2.44–2.45	17.5–18.0	9.4–9.8	75
74	281	277	278	29.28–29.33	2.43	17.0–17.4	9.0–9.3	74
73	280	–	277	29.23–29.27	2.42	16.5–16.9	8.5–8.9	73
72	279	276	276	29.17–29.22	2.41	16.1–16.4	8.1–8.4	72
71	277 –278	275	275	29.12–29.16	2.40	15.7–16.0	7.7–8.0	71
70	276	274	274	29.07–29.11	2.38–2.39	15.3–15.6	7.4–7.6	70
69	275	273	273	29.02–29.06	2.37	15.0–15.2	7.1–7.3	69
68	274	272	272	28.97–29.01	2.35–2.36	14.6–14.9	6.8–7.0	68
67	273	271	271	28.93–28.96	2.34	14.3–14.5	6.5–6.7	67
66	272	270	269 –270	28.86–28.92	2.33	14.0–14.2	6.1–6.4	66
65	271	269	268	28.82–28.85	2.31–2.32	13.7–13.9	5.9–6.0	65
64	270	268	267	28.76–28.81	2.30	13.3–13.6	5.6–5.8	64
63	269	267	266	28.70–28.75	2.29	13.0–13.2	5.2–5.5	63
62	268	266	265	28.65–28.69	2.27–2.28	12.7–12.9	5.0–5.1	62
61	267	265	264	28.61–28.64	2.26	12.5–12.6	4.7–4.9	61
60	266	264	263	28.55–28.60	2.25	12.2–12.4	4.4–4.6	60
59	265	263	262	28.50–28.54	2.24	11.9–12.1	4.2–4.3	59
58	264	–	261	28.44–28.49	2.23	11.6–11.8	4.0–4.1	58
57	263	262	260	28.37–28.43	2.22	11.3–11.5	3.8–3.9	57
56	262	261	–	28.32–28.36	2.21	11.1–11.2	3.6–3.7	56
55	261	260	259	28.27–28.31	2.20	10.8–11.0	3.5	55
54	260	259	258	28.23–28.26	2.19	10.5–10.7	3.3–3.4	54
53	259	258	257	28.18–28.22	2.18	10.3–10.4	3.1–3.2	53
52	258	257	256	28.09–28.17	2.17	10.0–10.2	2.9–3.0	52
51	257	256	255	28.02–28.08	2.16	9.8–9.9	2.8	51
50	256	255	254	27.95–28.01	2.14–2.15	9.6–9.7	2.6–2.7	50

— PERCENTILE RANKS FOR SCALED SCORES AND BACKGROUND FACTORS

State Percentile Ranks	Reading	Written Language	Mathematics	Entry Level Test	Socio-economic Index	Percent AFDC	Percent LES/NES Pupils	State Percentile Ranks
49	255	254	253	27.88–27.94	2.13	9.4–9.5	2.5	49
48	254	253	252	27.82–27.87	2.12	9.1–9.3	2.4	48
47	253	252	251	27.78–27.81	2.11	8.9–9.0	2.2–2.3	47
46	252	251	250	27.72–27.77	2.09–2.10	8.6–8.8	2.1	46
45	251	250	–	27.64–27.71	2.08	8.4–8.5	1.9–2.0	45
44	250	249	249	27.59–27.63	2.07	8.2–8.3	1.8	44
43	249	248	248	27.52–27.58	2.06	7.9–8.1	1.7	43
42	248	247	247	27.45–27.51	2.05	7.7–7.8	1.6	42
41	247	246	246	27.36–27.44	2.04	7.5–7.6	1.5	41
40	246	245	245	27.28–27.35	2.03	7.3–7.4	1.4	40
39	245	244	244	27.19–27.27	2.02	7.1–7.2	1.3	39
38	243 –244	243	243	27.12–27.18	2.01	6.9–7.0	1.2	38
37	242	242	242	27.03–27.11	2.00	6.6–6.8	1.1	37
36	241	241	241	26.96–27.02	1.99	6.4–6.5	1.0	36
35	240	240	240	26.87–26.95	1.98	6.2–6.3	0.1–0.9	35
34	239	239	239	26.77–26.86	1.97	6.0–6.1	–	34
33	237 –238	–	238	26.67–26.76	1.95–1.96	5.8–5.9	–	33
32	236	238	237	26.58–26.66	1.94	5.6–5.7	–	32
31	235	237	236	26.47–26.57	1.33	5.4–5.5	–	31
30	234	236	235	26.38–26.46	1.91–1.92	5.2–5.3	–	30
29	233	235	234	26.29–26.37	1.90	4.9–5.1	–	29
28	232	234	233	26.19–26.28	1.89	4.7–4.8	–	28
27	231	233	231 –232	26.08–26.18	1.87–1.88	4.5–4.6	–	27
26	229 –230	232	230	25.97–26.07	1.86	4.4	–	26
25	228	230 –231	229	25.81–25.96	1.84–1.85	4.1–4.3	–	25
24	227	229	228	25.72–25.80	1.83	3.9–4.0	–	24
23	226	228	226 –227	25.61–25.71	1.81–1.82	3.8	–	23
22	224 –225	227	225	25.50–25.60	1.80	3.5–3.7	–	22
21	222 –223	225 –226	223 –224	25.38–25.49	1.78–1.79	3.3–3.4	–	21
20	221	224	222	25.22–25.37	1.76–1.77	3.1–3.2	–	20
19	219 –220	222 –223	221	25.09–25.21	1.74–1.75	2.9–3.0	–	19
18	217 –218	221	219 –220	24.94–25.08	1.72–1.73	2.7–2.8	–	18
17	215 –216	219 –220	218	24.76–24.93	1.71	2.5–2.6	–	17
16	214	218	216 –217	24.58–24.75	1.69–1.70	2.3–2.4	–	16
15	212 –213	217	215	24.38–24.57	1.67–1.68	2.1–2.2	–	15
14	210 –211	215 –216	213 –214	24.17–24.37	1.65–1.66	1.9–2.0	–	14
13	208 –209	213 –214	211 –212	23.96–24.16	1.63–1.64	1.7–1.8	–	13
12	206 –207	211 –212	209 –210	23.69–23.95	1.61–1.62	1.5–1.6	–	12
11	203 –204	208 –210	207 –208	23.45–23.68	1.59–1.60	1.3–1.4	–	11
10	201 –202	206 –207	204 –206	23.09–23.44	1.57–1.58	1.2	–	10
9	198 –200	203 –205	201 –203	22.71–23.08	1.54–1.56	1.0–1.1	–	9
8	196 –197	200 –202	199 –200	22.36–22.70	1.51–1.53	0.8–0.9	–	8
7	192 –195	197 –199	196 –198	21.95–22.35	1.49–1.50	0.6–0.7	–	7
6	188 –191	193 –196	193 –195	21.46–21.94	1.45–1.48	0.4–0.5	–	6
5	183 –187	189 –192	190 –192	20.75–21.45	1.42–1.44	0.3	–	5
4	178 –182	185 –188	186 –189	20.04–20.74	1.38–1.41	0.1–0.2	–	4
3	172 –177	179 –184	182 –185	19.22–20.03	1.32–1.37	–	–	3
2	165 –171	172 –178	174 –181	18.07–19.21	1.25–1.31	–	–	2
1	1 –164	1 –171	1 –173	10.25–18.06	1.00–1.24	0.0	0.0	1

TABLE 2 — DISTRICT NORMS — MAY 1980 (N = 913) —

State Percentile Ranks	Reading	Written Language	Mathematics	Entry Level Test	Socio-economic Index	Percent AFDC	Percent LES/NES Pupils	State Percentile Ranks
99	329 –370	324 –355	330 –374	32.98–35.00	2.96–3.00	34.2–60.1	50.0–88.2	99
98	321 –328	316 –323	321 –329	32.11–32.97	2.92–2.95	30.8–34.1	35.0–49.9	98
97	314 –320	312 –315	312 –320	31.75–32.10	2.81–2.91	29.0–30.7	32.3–34.9	97
96	310 –313	307 –311	308 –311	31.48–31.74	2.77–2.80	27.7–28.9	27.3–32.2	96
95	307 –309	303 –306	305 –307	31.22–31.47	2.74–2.76	25.6–27.6	24.4–27.2	95
94	305 –306	299 –302	303 –304	31.03–31.21	2.70–2.73	24.5–25.5	22.2–24.3	94
93	304	296 –298	302	31.00–31.02	2.67–2.69	23.4–24.4	20.7–22.1	93
92	301 –303	294 – 295	300 –301	30.85–30.99	2.62–2.66	22.6–23.3	19.6–20.6	92
91	299 –300	293	297 –299	30.75–30.84	2.60–2.61	21.9–22.5	18.7–19.5	91
90	297 –298	292	295 –296	30.69–30.74	2.56–2.59	21.1–21.8	17.1–18.6	90
89	296	291	293 –294	30.63–30.68	2.53–2.55	19.9–21.0	16.0–17.0	89
88	295	289 –290	292	30.56–30.62	2.51–2.52	19.2–19.8	14.7–15.9	88
87	294	288	290 –291	30.42–30.55	2.50	18.7–19.1	14.1–14.6	87
86	291 –293	287	288 –289	30.37–30.41	2.49	18.5–18.6	13.6–14.0	86
85	290	285 –286	286 –287	30.31–30.36	2.47–2.48	18.0–18.4	13.0–13.5	85
84	289	284	285	30.24–30.30	2.46	17.5–17.9	12.5–12.9	84
83	288	283	284	30.17–30.23	2.44–2.45	16.9–17.4	11.7–12.4	83
82	287	282	283	30.10–30.16	2.43	16.4–16.8	11.1–11.6	82
81	286	281	282	30.01–30.09	2.42	16.2–16.3	10.6–11.0	81
80	284 –285	279 –280	281	29.98–30.00	2.40–2.41	15.9–16.1	10.0–10.5	80
79	283	278	280	29.95–29.97	2.38–2.39	15.4–15.8	9.3–9.9	79
78	282	277	279	29.91–29.94	2.37	15.2–15.3	8.9–9.2	78
77	281	–	278	29.85–29.90	2.35–2.36	14.8–15.1	8.6–8.8	77
76	280	276	277	29.78–29.84	2.33–2.34	14.6–14.7	8.1–8.5	76
75	–	275	276	29.75–29.77	2.32	14.3–14.5	7.7–8.0	75
74	279	274	–	29.69–29.74	2.30–2.31	14.0–14.2	7.2–7.6	74
73	278	273	275	29.66–29.68	2.29	13.8–13.9	6.8–7.1	73
72	277	272	274	29.61–29.65	2.28	13.6–13.7	6.3–6.7	72
71	275 –276	271	273	29.59–29.60	2.27	13.3–13.5	5.9–6.2	71
70	274	270	272	29.58	2.26	13.1–13.2	5.7–5.8	70
69	–	–	271	29.55–29.57	2.25	12.8–13.0	5.5–5.6	69
68	273	269	270	29.48–29.54	2.24	12.6–12.7	5.2–5.4	68
67	272	–	269	29.44–29.47	2.23	12.4–12.5	4.9–5.1	67
66	271	268	268	29.38–29.43	2.22	12.1–12.3	4.8	66
65	–	267	267	29.35–29.37	–	11.9–12.0	4.6–4.7	65
64	270	266	–	29.30–29.34	2.20–2.21	11.7–11.8	4.4–4.5	64
63	269	–	266	29.27–29.29	2.19	11.5–11.6	4.2–4.3	63
62	268	265	265	29.21–29.26	–	11.3–11.4	4.0–4.1	62
61	267	–	264	29.20	2.18	11.1–11.2	3.8–3.9	61
60	–	264	263	29.17–29.19	2.17	10.9–11.0	3.5–3.7	60
59	266	263	–	29.11–29.16	–	10.7–10.8	3.3–3.4	59
58	265	262	262	29.06–29.10	2.16	10.6	3.2	58
57	264	261	261	29.00–29.05	2.15	10.4–10.5	3.1	57
56	263	–	–	28.94–28.99	2.14	10.3	3.0	56
55	262	260	260	28.90–28.93	2.13	10.2	2.9	55
54	–	259	259	28.86–28.89	–	9.9–10.1	2.6–2.8	54
53	261	258	258	28.80–28.85	2.11–2.12	9.8	2.4–2.5	53
52	260	–	–	28.76–28.79	2.10	9.6–9.7	2.3	52
51	–	257	257	28.73–28.75	2.09	9.5	2.1–2.2	51
50	259	256	256	28.68–28.72	2.08	9.3–9.4	2.0	50

State Percentile Ranks	Reading	Written Language	Mathematics	Entry Level Test	Socio-economic Index	Percent AFDC	Percent LES/NES Pupils	State Percentile Ranks
49	258	255	255	28.64–28.67	2.07	9.1–9.2	1.9	49
48	257	254	254	28.61–28.63	–	8.9–9.0	1.7–1.8	48
47	256	–	–	28.57–28.60	2.06	8.8	1.5–1.6	47
46	–	253	253	28.54–28.56	2.05	8.6–8.7	1.4	46
45	255	252	–	28.46–28.53	2.04	8.4–8.5	1.2–1.3	45
44	254	–	252	28.43–28.45	2.03	8.2–8.3	1.1	44
43	253	251	251	28.34–28.42	2.02	8.0–8.1	0.9–1.0	43
42	252	250	250	28.29–28.33	2.01	7.7–7.9	0.8	42
41	–	–	249	28.22–28.28	2.00	7.6	0.7	41
40	251	249	–	28.18–28.21	–	7.4–7.5	0.6	40
39	–	248	248	28.12–28.17	1.99	7.3	0.4–0.5	39
38	250	247	–	28.07–28.11	–	7.1–7.2	0.1–0.3	38
37	249	–	247	28.03–28.06	1.98	7.0	–	37
36	248	246	246	27.98–28.02	1.97	6.9	–	36
35	247	245	–	27.93–27.97	1.96	6.6–6.8	–	35
34	245 –246	244	245	27.82–27.92	1.95	6.4–6.5	–	34
33	244	–	244	27.76–27.81	1.94	6.3	–	33
32	–	243	242 –243	27.70–27.75	1.93	6.1–6.2	–	32
31	243	242	241	27.62–27.69	1.92	5.9–6.0	–	31
30	242	–	240	27.51–27.61	1.91	5.7–5.8	–	30
29	241	241	239	27.49–27.50	1.89–1.90	5.6	–	29
28	240	240	–	27.42–27.48	1.88	5.4–5.5	–	28
27	239	239	237 –238	27.33–27.41	1.87	5.2–5.3	–	27
26	238	–	236	27.23–27.32	1.86	5.0–5.1	–	26
25	237	238	–	27.08–27.22	1.85	4.8–4.9	–	25
24	236	237	235	27.00–27.07	1.84	4.6–4.7	–	24
23	235	236	234	26.92–26.99	1.83	4.5	–	23
22	234	235	233	26.73–26.91	1.81–1.82	4.3–4.4	–	22
21	233	234	232	26.60–26.72	1.80	4.1–4.2	–	21
20	232	233	231	26.45–26.59	1.79	3.9–4.0	–	20
19	231	232	–	26.35–26.44	1.77–1.78	3.6–3.8	–	19
18	230	231	230	26.26–26.34	1.76	3.3–3.5	–	18
17	227 –229	230	229	26.13–26.25	1.75	3.1–3.2	–	17
16	226	229	228	25.98–26.12	1.73–1.74	3.0	–	16
15	224 –225	228	225 –227	25.83–25.97	1.72	2.7–2.9	–	15
14	223	226 –227	224	25.68–25.82	1.70–1.71	2.5–2.6	–	14
13	221 –222	225	223	25.54–25.67	1.68–1.69	2.2–2.4	–	13
12	220	223 –224	221 –222	25.26–25.53	1.67	1.8–2.1	–	12
11	219	221 –222	218 –220	25.03–25.25	1.65–1.66	1.6–1.7	–	11
10	217 –218	220	217	24.87–25.02	1.63–1.64	1.3–1.5	–	10
9	215 –216	218 –219	216	24.36–24.86	1.60–1.62	0.9–1.2	–	9
8	213 –214	216 –217	214 –215	24.02–24.35	1.56–1.59	0.6–0.8	–	8
7	211 –212	214 –215	212 –213	23.45–24.01	1.52–1.55	0.1–0.5	–	7
6	207 –210	212 –213	208 –211	22.93–23.44	1.48–1.51	–	–	6
5	204 –206	206 –211	202 –207	22.49–22.92	1.45–1.47	–	–	5
4	201 –203	201 –205	199 –201	21.90–22.48	1.40–1.44	–	–	4
3	194 –200	196 –200	196 –198	20.94–21.89	1.33–1.39	–	–	3
2	187 –193	190 –195	192 –195	19.95–20.93	1.22–1.32	–	–	2
1	167 –186	159 –189	161 –191	14.63–19.94	1.00–1.21	0.0	0.0	1

COMPARISON SCORE BANDS

	B. Comparison Score Bands The bands indicate typical performance of schools or districts which, statistically, are like yours.
School: Reading Written Language Mathematics	1979-80
District: Reading Written Language Mathematics	1979-80

Part B of page 1 of the report shows the Comparison Score Bands. The Comparison Score Bands take into consideration the conditions in which your school operates, such as characteristics of the community, and a measure of the prior performance of pupils. The Comparison Score Band therefore enables you to compare your school's scores with those of schools that have reported a set of background characteristics similar to those listed for your school. It does not say where you *should* score, only where schools with a set of background factors similar to yours *did* score.

Comparison Score Bands are calculated from the school background factors listed in the Background Factor Summary data block on the *Report*. Each Comparison Score Band represents the middle 50 percent of the range of scores that would be obtained by schools reporting background factors similar to yours.

The statistical procedures are such that the Comparison Score Band includes only the middle 50 percent of schools. If your school score falls above the Comparison Score Band, your school is in the upper 25 percent of the schools having similar reported background factors. Conversely, if your score falls below your Comparison Score Band, your school is in the lower 25 percent of the schools having similar reported background factors.

BACKGROUND FACTORS

This data block shows the basic numerical data for the four background factors which were used in calculating the Comparison Score Bands. Comparative background factor data are shown for a three-year period.

C. Background Factor Summary

Four background factors were used to calculate the comparison score bands for your school or district.

		77-78	78-79	79-80
Entry Level Test	School District			
Socioeconomic Index	School District			
Percent AFDC	School District			
Percent LES/NES Pupils	School District			

Educators wishing to compare their school's background factor data with those of other schools should use Table 1 of this document (Table 2 for a district-level report). The tables provide a convenient method of converting the numerical data for 1979-80 into statewide percentile ranks. (The percentile ranks for previous years can be found in the *Interpretive Supplement* for those years.) It should be noted that a higher percentile rank indicates only the relative standing of a school in terms of a background factor. The following sections explain briefly how each background factor is determined.

Entry Level Test. The first factor reported is the mean score obtained in the fall of 1979 by the first-grade pupils in the school. The test includes items measuring the learning skills of immediate recall, letter recognition, auditory discrimination, visual discrimination, and language development.

The selection of skills assessed by the *Entry Level Test* was based on the need to know what level of skills children have when they enter the first grade as well as the need to account for initial differences in readiness when analyzing subsequent pupil achievement in the third grade. A high score on the *Entry Level Test* indicates that a school's entering first graders tend to have a greater readiness for learning than those from schools with lower scores.

Socioeconomic index. The socioeconomic index is an indicator of the occupations of the parents of third-grade pupils. On the back of each pupil's test booklet, the teacher identified from the following list the occupational category that corresponded most closely to the occupation of the pupil's father, mother, or guardian:

1 — • Unknown
    • Unskilled employees (and welfare)

2 — • Skilled and semiskilled employees

3 — • Semiprofessionals, clerical and sales workers, and technicians
    • Executives, professionals, and managers

The first two categories were assigned a value of 1; the third, a value of 2; and the last two, a value of 3. The socioeconomic index is the average (mean) of these values for all third-grade pupils in the district. A high value indicates that the district serves a community with a large percentage of people engaged in professional and semiprofessional occupations. (In 1977-78 the Socioeconomic Index was calculated from both second- and third-grade pupils because both were then administered the same *Reading Test.*)

Percent AFDC. The AFDC figure is the percent of pupils whose families are receiving assistance under the Aid to Families with Dependent Children Program. Late in 1979 each district completed a questionnaire in which it was asked to give the enrollment of each school in the district and the number of pupils in each school whose families were receiving AFDC assistance as of October, 1979.

For each school with a third grade, the number of pupils from AFDC families in the school attendance area was divided by the sum of the public and private school enrollment to yield a percent AFDC figure. The district AFDC value presented on the profile was calculated by weighting the percent AFDC figure for each school by the number of third-grade pupils tested in the school.

Percent LES/NES. The percent LES/NES is the percent of limited- or non-English-speaking pupils. The figure was derived from data filled in on the back of each pupil's *Survey of Basic Skills: Grade 3.* Teachers were asked to classify each pupil according to four language-proficiency categories:

1. English only
2. Fluent English and a second language
3. Limited English and a second language
4. Non-English speaking

The percent LES/NES pupils is the percentage of pupils belonging to categories 3 and 4.

PUPIL SCORE DISTRIBUTIONS

The third data block, Pupil Score Distributions, provides a more detailed picture of how your pupils have scored.

The Pupil Score Distributions data block shows a profile of the scores for your school. The statewide distribution of pupil scores is divided into four equal groups by the state quartiles (Q_1, Q_2, Q_3). Each quartile marks off, respectively, the lowest quarter of scores, the next highest quarter, and so on. The percentage of your pupils scoring in each of these four statewide groups is presented for each content area. (No pupil score distributions are reported for schools or districts which tested fewer than 15 pupils.)

D. Pupil Score Distributions

This section of the report enables you to compare the distribution of your pupil scores with the state distribution of pupil scores.

Content Area	Percentage of Pupils in Each Quarter of the State Pupil Distribution			
	Below Q_1	Between Q_1 and Q_2	Between Q_2 and Q_3	Above Q_3
Reading				
Written Language				
Mathematics				

A "perfectly average" California school would have 25 percent of its pupils in each of the four quarters. A high-scoring school probably will have more than 25 percent of its pupils scoring in each of the two highest quarters. Similarly, a low-scoring school will be more strongly represented in the lowest two quarters. The following examples show the distribution of scores for two schools which scored about average but have different distributions of scores.

Content Area	Percentage of Pupils in Each Quarter of the State Pupil Distribution			
	Below Q_1	Between Q_1 and Q_2	Between Q_2 and Q_3	Above Q_3
Reading	15%	35%	35%	15%

Figure 2

The distribution of scores for the school represented by Figure 2 shows that fewer than 25 percent of the pupils scored in the lowest quartile.

Content Area	Percentage of Pupils in Each Quarter of the State Pupil Distribution			
	Below Q_1	Between Q_1 and Q_2	Between Q_2 and Q_3	Above Q_3
Reading	30%	20%	20%	30%

Figure 3

The school represented by Figure 3 has approximately the same scaled score as the school in Figure 2. However, this mean score is based upon a different distribution of pupil scores; only 15 percent of the pupils were below Q_1 in School 2 whereas 30 percent of the pupil scores in School 3 were below Q_1. The same is also true about Q_3; 15 percent of the pupils were above Q_3 in School 2 as contrasted with 30 percent of the pupils in School 3. The pupils in School 2 are a relatively homogeneous population; School 3 has a more diverse population of pupils.

In this manner the Pupil Score Distributions provide additional information about the achievement of pupils in your school, information which may have implications for your educational program.

SUBGROUP REPORT

A *Subgroup Report* that supplements the *Survey of Basic Skills: Grade 3* is mailed at a later date to all districts. *The Subgroup Report* provides additional information on the performance of third grade pupils tested last spring. Test scores have been calculated for subgroups within the classifications of sex, socioeconomic status, English language fluency, mobility, and attitudes toward reading, writing, and mathematics.

Table 3

Conversion Between Percent Correct and Scaled Scores for Reading Skill Areas

Skill Area	Scaled Score																																
	100	110	120	130	140	150	160	170	180	190	200	210	220	230	240	250	260	270	280	290	300	310	320	330	340	350	360	370	380	390	400	Percent Correct Score
Word identification	28	31	35	38	42	46	50	53	57	61	64	68	71	74	76	79	81	83	85	87	88	89	91	92	93	94	94	95	96	96	96	
Phonics	29	32	36	40	44	48	52	56	59	63	67	70	73	76	79	81	84	85	87	89	90	91	92	93	94	95	96	96	97	97	97	
Vowels	27	31	34	38	42	46	50	54	58	62	65	69	72	75	78	80	82	84	86	88	89	90	92	93	93	94	95	95	96	96	97	
Consonants	30	34	37	41	45	49	53	57	61	65	68	72	75	78	80	83	85	87	88	90	91	92	93	94	95	96	96	97	97	98	98	
Structural analysis	27	30	33	37	40	44	48	51	55	58	62	65	68	71	74	76	79	81	83	84	86	88	89	90	91	92	93	94	94	95	96	
Prefixes, suffixes, and roots	26	28	31	34	37	40	43	46	49	53	56	59	62	65	68	71	73	75	78	80	82	83	85	87	88	89	90	91	92	93	94	
Contractions and compound words	29	33	37	41	45	50	54	59	63	67	71	74	77	80	83	85	87	89	90	92	93	94	95	95	96	97	97	97	98	98	98	
Vocabulary	20	23	25	28	30	33	36	39	42	45	48	52	55	58	61	64	66	69	71	74	76	78	80	82	84	85	86	88	89	90	91	
Recognizing word meanings	23	26	28	31	34	38	41	44	48	51	55	58	61	64	67	70	73	75	78	80	82	83	85	87	88	89	90	91	92	93	94	
Using context	17	19	21	23	25	28	30	33	36	38	41	44	47	50	53	56	59	62	64	67	70	72	74	76	78	80	82	84	85	87	88	
Comprehension	25	27	30	32	35	38	41	44	47	50	53	56	59	62	64	67	69	72	74	76	78	80	82	83	85	86	87	88	90	90	91	
Literal	26	28	30	33	36	38	41	44	47	50	53	56	58	61	64	66	69	71	73	75	77	79	81	82	84	85	86	88	89	90	91	
Details	25	27	29	32	34	37	40	43	45	48	51	54	57	59	62	64	67	69	71	74	76	77	79	81	82	84	85	86	87	88	89	
From a single sentence	25	28	30	32	35	37	40	43	46	48	51	54	57	59	62	65	67	70	72	74	76	78	80	82	83	85	86	87	88	89	90	
From two or three sentences	24	27	29	31	34	37	39	42	45	48	51	54	57	59	62	64	67	69	71	73	75	77	78	80	81	83	84	85	86	87	88	
Pronoun references	28	31	33	36	39	42	46	49	52	55	58	61	64	67	70	73	75	77	79	81	83	85	86	88	89	90	91	92	93	93	94	
Sequence	25	28	30	32	35	37	40	43	45	48	51	54	56	59	62	64	67	69	71	73	75	77	79	80	82	83	85	86	87	88	89	
Inferential	24	26	29	32	34	37	40	43	47	50	53	56	59	62	65	68	70	73	75	77	79	81	83	84	86	87	88	89	90	91	92	
Main ideas	27	29	32	35	38	41	44	48	51	54	57	60	63	66	68	71	73	76	78	80	82	83	85	86	87	89	90	91	92	92	93	
Cause and effect	25	27	30	32	35	38	41	44	47	50	54	57	60	63	65	68	71	73	75	78	80	81	83	85	86	88	89	90	91	92	93	
Drawing conclusions	22	24	27	29	32	35	38	41	44	47	51	54	57	60	63	66	68	71	73	75	78	79	81	83	85	86	87	88	89	90	91	
About characters	25	27	30	33	37	40	44	47	51	54	57	61	64	67	70	72	75	77	79	81	83	85	86	87	88	90	91	91	92	93	94	
From details	19	21	23	25	27	29	32	34	37	40	42	45	48	51	54	57	60	62	65	68	70	72	75	77	79	80	82	84	85	86	88	
From overall meaning	21	24	26	28	31	34	37	40	43	47	50	53	56	60	63	66	68	71	74	76	78	80	82	84	86	87	88	90	91	92	92	
Study locational	33	38	42	47	52	57	61	66	70	73	77	80	82	85	87	89	90	91	92	93	94	95	96	96	97	97	97	98	98	98	98	
Alphabetizing	35	39	43	47	51	55	59	63	66	70	73	75	78	80	82	84	86	87	89	90	91	92	93	94	94	95	96	96	97	97	97	
Table of contents	32	37	42	47	53	58	63	68	73	77	81	84	87	89	91	93	94	95	96	97	97	98	98	99	99	99	99	99	100	100	100	
TOTAL READING	26	28	31	34	37	40	43	47	50	53	56	59	63	66	68	71	74	76	79	81	83	84	86	88	89	90	91	92	93	94	95	

Table 4

Conversion Between Percent Correct and Scaled Scores for Written Language Skill Areas

Skill Area	Scaled Score																															
	100	110	120	130	140	150	160	170	180	190	200	210	220	230	240	250	260	270	280	290	300	310	320	330	340	350	360	370	380	390	400	Percent Correct Score
Word forms	26	29	32	36	39	43	47	51	55	58	62	65	69	72	74	77	79	81	83	85	86	88	89	90	91	92	93	94	94	95	95	
Prefixes	28	31	35	38	42	46	50	54	58	62	65	69	72	75	78	81	83	85	87	89	90	91	93	94	94	95	96	96	97	97	98	
Inflectional suffixes	27	30	34	37	41	45	49	53	57	61	65	68	71	74	76	78	80	82	84	85	87	88	89	90	91	91	92	93	93	94	94	
Derivational suffixes	25	28	32	35	39	43	47	52	56	60	64	67	71	74	76	79	81	83	85	87	88	89	91	92	93	93	94	95	95	96	96	
Irregular noun plurals	22	24	27	29	32	35	38	41	45	48	51	55	58	61	64	66	69	72	74	76	78	80	82	83	85	86	87	88	90	91	91	
Contractions	29	32	35	39	43	46	50	54	58	62	65	69	72	75	78	80	83	85	87	88	90	91	92	93	94	95	96	96	97	97	97	
Standard English usage	31	33	36	39	42	45	48	51	54	57	60	63	66	68	71	73	75	77	78	80	81	83	84	85	86	87	88	89	89	90	91	
Irregular verbs	31	35	38	41	45	48	52	55	59	62	65	68	71	74	76	79	81	83	84	86	87	89	90	91	92	93	94	94	95	95	96	
Pronouns	38	41	43	45	48	50	52	54	57	59	61	63	64	66	68	69	71	72	73	75	76	77	78	79	80	80	81	82	82	83	84	
Subject-verb agreement	21	23	26	29	32	36	39	43	46	50	53	56	59	62	65	68	70	72	74	76	78	79	81	82	84	85	86	87	88	88	89	
Noun determiners	33	36	39	42	45	48	51	54	57	60	63	66	69	71	74	76	78	80	82	83	85	86	88	89	90	91	92	92	93	94	94	
Language choices	23	26	28	31	34	37	40	43	46	49	52	55	58	61	63	66	69	71	73	75	77	79	81	83	84	86	87	88	89	90	91	
Sensory words	27	29	32	35	39	42	45	48	52	55	58	61	64	67	70	73	75	77	79	81	83	85	86	88	89	90	91	92	93	93	94	
Specific words	20	22	24	26	29	31	34	37	39	42	45	48	51	54	57	59	62	65	67	70	72	74	76	78	80	82	83	85	86	87	88	
Sentence recognition	32	35	39	42	46	49	53	56	60	63	66	69	72	75	77	80	82	84	86	87	89	90	91	92	93	94	94	95	96	96	97	
Statements and questions	31	33	36	39	42	45	49	52	55	58	61	64	67	70	72	75	77	79	81	83	85	86	88	89	90	91	92	93	94	94	95	
Complete sentences	33	36	39	43	46	50	54	57	61	64	68	71	73	76	79	81	83	85	87	88	89	91	92	93	94	94	95	96	96	96	97	
Supplying verbs	31	34	38	41	45	49	52	56	59	63	66	69	72	75	78	80	82	84	86	87	89	90	91	92	93	94	95	95	96	96	97	
Supplying subjects	34	38	41	44	48	52	55	59	62	66	69	72	75	77	80	82	84	86	87	89	90	91	92	93	94	95	95	96	96	97	97	
Paragraphs	27	30	32	35	38	41	44	47	50	53	56	59	62	65	67	70	72	75	77	79	80	82	84	85	87	88	89	90	91	92	93	
Topic sentences	27	29	32	35	37	40	43	46	49	52	55	58	61	64	66	69	71	73	75	77	79	81	83	84	86	87	88	89	90	91	92	
Details and sequence	28	30	33	36	39	42	45	48	51	54	57	60	63	66	68	71	73	76	78	80	82	83	85	86	88	89	90	91	92	92	93	
Capitalization	38	42	46	50	54	59	63	67	71	75	78	81	84	86	88	90	91	93	94	95	95	96	97	97	98	98	98	99	99	99	99	
Persons	43	47	50	54	58	62	66	70	74	77	80	83	85	87	89	91	92	93	94	95	96	96	97	97	98	98	98	98	99	99	99	
Places	36	40	45	50	54	59	63	67	71	75	78	81	84	86	88	90	92	93	94	95	96	96	97	97	98	98	99	99	99	99	99	
Days and months	34	38	42	46	51	55	59	64	68	72	75	79	81	84	86	88	90	92	93	94	95	96	96	97	97	98	98	98	99	99	99	
Punctuation	29	31	34	37	41	44	47	50	54	57	60	63	66	69	71	74	76	79	81	82	84	86	87	88	90	91	92	92	93	94	94	
Periods and question marks	32	35	39	42	46	49	53	57	60	64	67	70	73	76	78	81	83	85	86	88	89	91	92	93	94	94	95	96	96	97	97	
Commas	24	26	28	31	33	36	39	42	44	47	50	53	56	59	62	65	68	70	73	75	77	79	81	82	84	85	87	88	89	90	91	
Apostrophes	30	33	36	39	43	46	49	53	56	59	63	66	69	71	74	76	79	81	83	84	86	88	89	90	91	92	93	94	94	95	96	
Spelling	37	39	42	44	47	50	52	55	57	60	62	64	67	69	71	73	75	76	78	79	81	82	84	85	86	87	88	89	89	90	91	
Predictable words	40	43	46	49	52	55	58	61	64	66	69	72	74	76	78	80	82	84	85	86	88	89	90	91	92	93	93	94	94	95	96	
Words with suffixes	29	30	32	33	35	37	38	40	42	44	46	48	50	52	54	56	59	61	63	64	66	68	70	72	73	75	76	78	79	80	82	
Demons and homophones	37	39	41	43	46	48	50	53	55	57	59	62	64	66	68	70	71	73	75	76	78	79	80	82	83	84	85	86	87	87	88	
TOTAL WRITTEN LANGAUGE	30	33	36	39	42	45	49	52	55	59	62	65	68	71	74	76	78	81	83	84	86	88	89	90	91	92	93	94	95	95	96	

Table 5

Conversion Between Percent Correct and Scaled Scores for Mathematics Skill Areas

Skill Area	Scaled Score																															
	100	110	120	130	140	150	160	170	180	190	200	210	220	230	240	250	260	270	280	290	300	310	320	330	340	350	360	370	380	390	400	Percent Correct Score
Counting and place value	36	39	42	45	49	52	56	59	62	66	69	72	74	77	79	81	83	85	87	88	90	91	92	93	94	94	95	96	96	97	97	
Skills	37	40	43	46	50	53	56	60	63	66	69	72	75	77	80	82	84	86	87	89	90	91	92	93	94	95	95	96	96	97	97	
Applications	34	37	40	44	47	51	54	58	61	65	68	71	74	76	79	81	83	85	86	88	89	91	92	93	93	94	95	95	96	96	97	
Operations	37	39	42	44	47	49	52	55	57	60	62	65	67	69	72	74	76	78	80	81	83	84	86	87	88	89	90	91	92	93	93	
Basic facts	53	56	59	62	64	67	69	72	74	76	79	81	83	84	86	87	89	90	91	92	93	94	94	95	96	96	97	97	97	98	98	
Addition	49	52	55	58	60	63	65	68	70	73	75	77	79	81	82	84	85	87	88	89	90	91	92	93	94	94	95	95	96	96	97	
Subtraction	34	37	39	41	43	46	48	51	53	56	59	61	64	66	69	71	73	75	77	79	81	83	84	86	87	88	89	90	91	92	93	
Multiplication	26	28	31	33	35	38	41	43	46	49	52	54	57	60	62	65	67	70	72	74	76	78	79	81	82	84	85	86	87	88	89	
Applications	28	30	32	35	37	40	42	45	48	51	54	56	59	62	64	67	69	71	74	76	78	79	81	83	84	86	87	88	89	90	91	
Basic facts	28	31	33	36	38	41	44	47	50	53	55	58	61	64	67	69	72	74	76	78	80	82	84	85	87	88	89	90	91	92	93	
Addition/subtraction	36	39	41	44	47	50	53	56	59	62	64	67	70	72	74	77	79	80	82	84	85	87	88	89	90	91	92	93	94	94	95	
Multiplication	16	18	20	22	24	26	28	30	33	35	38	40	43	46	49	52	54	57	60	62	65	67	70	72	74	76	78	80	82	83	85	
Nature of numbers and properties	39	41	44	46	49	52	54	57	60	63	65	68	70	73	75	77	79	81	83	84	86	87	88	89	90	91	92	93	93	94	95	
Properties and relationships	36	38	41	44	47	50	53	56	59	62	65	68	70	73	75	78	80	82	84	85	87	88	89	90	91	92	93	94	94	95	95	
Money and fractions	48	50	52	54	57	59	61	64	66	68	71	73	75	78	80	82	83	85	87	88	89	90	91	92	93	93	94	95	95	95	96	
Applications	33	36	38	41	44	46	49	52	55	58	60	63	65	68	70	72	74	76	78	80	82	83	85	86	87	88	89	90	91	92	93	
Geometry	33	36	39	42	45	48	52	55	58	61	64	66	69	71	74	76	78	79	81	83	84	85	86	88	89	90	90	91	92	93	93	
Skills	35	38	41	45	48	51	54	58	60	63	66	68	71	73	75	77	78	80	82	83	84	85	86	88	88	89	90	91	92	92	93	
Applications	28	31	33	37	40	43	46	50	53	56	59	63	65	68	71	73	76	78	80	82	83	85	86	88	89	90	91	92	93	93	94	
Measurement	32	35	38	41	43	46	50	53	56	59	62	65	67	70	72	75	77	79	81	83	85	86	88	89	90	91	92	93	94	94	95	
Linear measures	30	33	35	38	40	43	46	49	52	55	57	60	63	66	68	71	73	76	78	80	82	83	85	87	88	89	90	91	92	93	94	
Other measures	37	40	43	46	49	52	56	59	62	65	68	70	73	76	78	80	82	84	86	87	89	90	91	92	93	94	94	95	96	96	97	
Applications	28	31	34	37	40	43	46	49	52	56	59	62	65	68	70	73	75	78	80	82	83	85	86	88	89	90	91	92	93	93	94	
Patterns and graphs	31	33	36	39	43	46	49	52	56	59	62	65	67	70	72	74	77	78	80	82	83	85	86	87	89	90	91	91	92	93	94	
Skills	27	29	32	34	36	39	41	44	46	49	51	54	57	59	62	64	66	69	71	73	75	77	79	80	82	83	85	86	87	88	89	
Applications	34	37	41	45	49	53	57	61	65	69	72	75	78	81	83	85	87	88	90	91	92	93	94	95	95	96	96	97	97	97	98	
Problem solving	31	33	36	39	42	45	48	51	54	57	60	63	65	68	71	73	75	77	79	81	83	85	86	87	88	89	90	91	92	93	93	
Analysis and models	33	35	38	40	42	45	48	50	53	55	58	60	63	65	68	70	72	74	76	78	80	81	83	84	86	87	88	89	90	91	92	
Applications	30	33	36	39	42	45	48	51	54	57	60	63	66	68	71	73	76	78	80	81	83	85	86	87	88	90	90	91	92	93	94	
TOTAL MATHEMATICS	33	35	38	41	44	47	50	53	56	59	62	65	68	70	73	75	77	79	81	83	85	86	88	89	90	91	92	93	94	94	95	

SKILL AREA DESCRIPTIONS

Skill areas assessed in:

Reading ____ 33
Written Language ____ 35
Mathematics ____ 38

California Assessment Program

Description of the Test

The *Survey of Basic Skills: Grade 3* consists of 1,020 items. The test includes 270 reading items, 390 written language items, and 360 mathematics items. This section of the report describes the skills which are assessed in each of the three content areas.

The *Survey* has been divided into 30 unique forms. Under the matrix sampling technique, each pupil takes one form made up of 13 written language items, 12 mathematics items, and nine reading items. The content areas appear in this order in every test booklet. Each test form contains items from all major skill areas, and a balance is maintained between easy and difficult items. A practice test is provided so that pupils can become familiar with marking requirements, directions, and item formats.

The language questions appear first in the test booklets since the directions for most of them are administered orally. Pupils work on their own on the remaining test items. Space for working the mathematics problems is provided adjacent to the math items in the test booklets. Each form includes only one reading passage, and all of the reading questions are derived from this selection. In this way, pupils are never asked to deal with reading skills apart from the context of a passage. Three attitudinal questions about the basic skills appear at the end of each booklet.

Skill Areas Assessed in Reading, *Survey of Basic Skills: Grade 3*

Passage A

The time is midnight. The full moon is high in the sky. Here and there a bonfire lights the beach. People are gathered around the fires, waiting. Suddenly, the beach is alive with thousands of wiggling fish as wave after wave carries them to shore. At once the people are splashing through the waves, snatching up the fish.

Does it sound like a wild story? It is not just a story. It is a grunion run, and it happens several times every year in southern California.

The grunion is a small, silvery fish that is between five and six inches long. The season for laying eggs is from the middle of February to early September. During those months, on the nights of the highest tide, the grunion swim to shore to lay their eggs in the sand. The next high tide uncovers the eggs. The baby grunion burst out like popcorn and ride the waves to sea.

Passage B

George woke up one bright Saturday morning feeling wonderful. He and Gloria were at last going to Disneyland.

After an hour's drive on the freeway, they were there!

The first thing they saw was Mickey Mouse leading his band to the railway station. Uncle John took a picture of the twins with Mickey Mouse.

"Let's go on the Matterhorn," shouted Gloria. "I'll sit here and watch," said Uncle John.

They climbed into a car, and soon they were at the top of the mountain. Then down they rushed, faster and faster, in and out of tunnels, flying like the wind.

All of a sudden they came to a stop. They were glad to be safely on the ground again!

They had many more exciting rides and saw lots of wonderful things.

As they rode home, tired but happy, they thanked Uncle John for a thrilling treat.

Skill Area	*Number of Items*	*Description of Skill Area*	*Illustrative Test Question*
I. Word Identification	**60**		
A. Phonics	30		
1. Vowels	15	The student will identify a word which rhymes with a word used and underlined in a passage or will identify a word which contains the same tested vowel sound as a word used and underlined in a test passage.	Mark the word that **rhymes** with moon. o tin o tune o tan (See Passage A.) o tone
2. Consonants	15	The student will identify a word which rhymes with a word used and underlined in a passage or will identify a word which contains the same tested consonant sound(s) as a word used and underlined in a passage.	Mark the word that **begins** with the same sound as the c in car. o chose o circle (See Passage B.) o color o chick
B. Structural analysis	30		
1. Prefixes, suffixes, and roots	18	The student will identify (1) the way in which a suffix or prefix alters the meaning of a base word; (2) the root or base form of a tested regular verb (for example, hurried —— hurry); and (3) the semantic association between an irregular past tense of a verb and its infinitive (for example, taught —— teach).	In the word faster, the er makes the word mean o not as fast o more fast (See Passage B.) o just as fast o less fast The root (or base) of the word wiggling is o wig o window (See Passage A.) o wing o wiggle The word woke is closest in meaning to o work o week (See Passage B.) o wake o walk
2. Contractions and compound words	12	The student will identify the words which make up a contraction or compound word, both of which are used and underlined in a passage.	The two words in popcorn are o po + pcorn o pop + corn (See Passage A.) o popc + orn o popco + rn The word I'll means the same as o is all o I will (See Passage B.) o it will o I fill

Skill Areas Assessed in Reading, *Survey of Basic Skills: Grade 3* (Continued)

Skill Area	*Number of Items*	*Description of Skill Area*	*Illustrative Test Question*
II Vocabulary	30		
A. Recognizing word meanings	16	The student will identify the definitions, synonyms, and antonyms of words which are used and underlined in a passage.	In this story, shouted means o watched o climbed (See Passage B.) o yelled o pictured The opposite of high is o small o alive (See Passage A.) o low o tall
B. Using context	14	The student will use the context of a passage to identify the meaning of a multiple-meaning word which is used and underlined in a passage.	In this story, saw means o a tool o to cut wood (See Passage B.) o a fun ride o looked at
III Comprehension	150		
A. Literal	74		
1. Details	37		
a. From a single sentence	20	The student will identify the verbatim answer to a question which is derived entirely from a single sentence within a passage.	Who took a picture? o Uncle John o George (See Passage B.) o Mickey Mouse o Gloria
b. From two or three sentences	17	The student will identify the verbatim answer to a question which is derived from putting together two or three sentences within a passage.	Where were the people waiting? o in a boat o near a house (See Passage A.) o under a tent o on the beach
2. Pronoun references	18	The student will answer a question which involves identifying the antecedent of a pronoun.	Who saw Mickey Mouse? o the band o George and Gloria (See Passage B.) o the mountain men o Aunt Mary
3. Sequence	19	The student will answer a question which involves identifying the sequence of events, facts, or other elements in a passage.	Which of these does the story tell about last? o the bonfire o the baby grunion (See Passage A.) o laying eggs o the waiting people

Skill Area	*Number of Items*	*Description of Skill Area*	*Illustrative Test Question*
B. Inferential	76		
1. Main ideas	19	The student will identify the primary topic of a passage.	This story is mostly about o a ride in the car o Uncle John (See Passage B.) o a day at Disneyland o the Matterhorn
2. Cause and effect	20	The student will associate a cause with an effect.	Why were people waiting on the beach? o to ride on the waves o to cook the popcorn (See Passage A.) o to see the moon o to snatch up the fish
3. Drawing conclusions	37		
a. About characters	15	The student will draw a conclusion about the feelings or attitudes of a character(s).	At the beginning of the story, Gloria probably felt o sad o angry (See Passage B.) o excited o disappointed
b. From details	12	The student will draw a conclusion from a detail in a story.	You can tell from the story that baby grunion probably o will die in very deep water o need to be taught to swim o will lay five or six eggs (See Passage A.) o can stay alive in deep water
c. From overall meaning	10	The student will draw a conclusion from the overall meaning of a story.	This story tells about o a day of fun and excitement o a day of hard work (See Passage B.) o a night of worry and fear o a night of quiet rest
IV Study Locational	30		
A. Alphabetizing	15	The student will select from four words the one which comes first in alphabetical order.	Choose the word that comes first in ABC order. o net o rice o map o spot
B. Table of contents	15	The student will use a sample Table of Contents to find the page number of a story.	**Use the Table of Contents to answer the question below.** TABLE OF CONTENTS The Orange Clock 2 The Purple Boat 6 The Yellow Pail 10 The Green Ribbon 14 On which page would you find "The Purple Boat"? o page 2 o page 6 o page 10 o page 14

Skill Areas Assessed in Written Language, *Survey of Basic Skills: Grade 3*

Skill Area	*Number of Items*	*Description of Skill Area*	*Illustrative Test Question*
I Word Forms	**66**		
A Prefixes	14	The student will write a prefix (such as *un-*, *pre-*, and *dis-*) for a word in a sentence which provides a context clue for the appropriate prefix.	The teacher says: Fill in the bubble next to the one which completes the sentence correctly. He cried because he was so ___happy. o pre o un o ex o re
B Inflectional suffixes	11	The student will select the appropriate inflectional suffix (*-s, -'s, -ed, -ing, -er, -est*) for a word in a given sentence.	The teacher says: Fill in the bubble next to the one which completes the sentence correctly. Yesterday the girls _____. o walks o walked o walking o walk
C Derivational suffixes	11	The student will select the appropriate derivational suffix (*-ly, -er, -ful, -ness, -less*) for a word in a given sentence.	The teacher says: Fill in the bubble next to the one which completes the sentence correctly. The flowers are beauti_____. o ful o ness o ly o er
D Irregular noun plurals	14	The student will select the appropriate irregular noun plural (such as *children*, *mice*, *women*) for a blank in a sentence.	The teacher says: Fill in the bubble next to the one which completes the sentence correctly. We saw three _____. o mouse o mouses o mice o moues
E Contractions	15	The student will select the correct way of writing a contraction for two words presented and underlined in a sentence.	There is a short way to write the underlined words in the sentence. Choose the correct one. This looks like my dog, but it is not. o isnot o o'nt o isn't o isnt
II Standard English Usage	**60**		
A Irregular verbs	15	The student will select the appropriate form of an irregular verb for a blank in a sentence.	The teacher says: Fill in the bubble next to the one which completes the sentence correctly. Juan has _____ a story about horses. o wrote o write o written o writed

Skill Area	*Number of Items*	*Description of Skill Area*	*Illustrative Test Question*
B Pronouns	15	The student will select the correct pronoun for a blank in a sentence.	The teacher says: Fill in the bubble next to the one which completes the sentence correctly. ___ went for a ride. o Us o Him o Her o We
C Subject-verb agreement	16	The student will select the verb form which agrees in number with the subject of the sentence.	The teacher says: Fill in the bubble next to the one which completes the sentence correctly. Every day, Martin _____ to school. o have walked o walks o walk o were walking
D Noun determiners	14	The student will select the appropriate noun determiner for a blank in a sentence.	The teacher says: Fill in the bubble next to the one which completes the sentence correctly. _____ children broke the toy. o Ehis o One o That o Those
III Language Choices	**30**		
A Sensory words	15	The student will select the word which appeals to a given sense for a blank in a sentence.	Choose the word that tells you how the cat would **feel** if **touched**. The cat was _____. o black o furry o loud
B Specific words	15	The student will select the most specific word for a blank in a sentence.	Choose the one that tells **exactly** what Joe lost. Joe lost a _____. o toy o thing o boat
IV Sentence Recognition	**75**		
A Statements and questions	15	The student will select the word ordering of a sentence which will form a question (or statement).	Choose the one which will make a **question**. ___ ___ ___ to the store? o Go did Mary o Did Mary go o Mary did go Choose the one which will make a **telling** sentence. ___ ___ ___ the ring. o Has he lost o He has lost o Has lost he

Skill Areas Assessed in Written Language, *Survey of Basic Skills: Grade 3* (Continued)

Skill Area	Number of Items	Description of Skill Area	Illustrative Test Question
B. Complete sentences	60		
1. Supplying verbs	30	The student will select the word group which supplies a verb needed to form a complete sentence.	The teacher says: Fill in the bubble next to the words which are needed to form a complete sentence. Sometimes Dan ___ ___ ___. o down the street o in the class o runs to school o to the teacher
2. Supplying subjects	30	The student will select the word group which supplies a subject needed to form a complete sentence.	The teacher says: Fill in the bubble next to the words which are needed to form a complete sentence. ___ ___ peanut shells at the people. o Have thrown o Monkeys threw o Were throwing o To throw
V. Paragraphs	30		
A. Topic sentences	15	The student will select a topic sentence for a blank at the beginning of a paragraph.	The teacher says: The paragraph in box number eight needs a sentence in the blank. Read the paragraph, and mark the bubble next to the sentence which goes best with the rest of the paragraph. ___ He has two new sweaters. He also has a cap. The cap looks nice with the sweaters. o Pablo has some new clothes o Pablo goes to school o Pablo loves to cook o Pablo is eight years old
B. Details and sequence	15	The student will select a sentence which provides a relevant detail (or needed sequential element) for a blank in a paragraph.	The teacher says: The paragraph in box number eight needs a sentence in the blank. Read the paragraph, and mark the bubble next to the sentence which goes best with the rest of the paragraph. Penny has some pet rats. She also has a cat. ___ o Joe and Jane are reading about a horse o The rats bit Penny's cat on the nose o It is dark deep down in the sea o Pete wants a stuffed animal for his birthday The teacher says: The paragraph in box number eight needs a sentence in the blank. Read the paragraph, and mark the bubble next to the sentence which goes best with the rest of the paragraph. Jan stepped in some mud. ___ ___ Then she put them on a tree to dry. Two days later, she found a bird nest in one boot. o The bird had three babies o She washed her boots o It was a big nest
VI. Capitalization	30		
A. Persons	10	The student will select the correctly capitalized words (such as initials and names of persons and animals) for the blanks in a sentence.	The teacher says: Fill in the bubble next to the one that is capitalized correctly. ___ ___ ___ are twins. o lucy and larry o Lucy and larry o lucy and Larry o Lucy and Larry

Skill Area	Number of Items	Description of Skill Area	Illustrative Test Question
B. Places	10	The student will select the correctly capitalized words (such as geographical locations, street names, and rivers) for the blanks in a sentence.	The teacher says: Fill in the bubble next to the one that is capitalized correctly. We are moving to ___ ___. o San diego o san diego o san Diego o San Diego
C. Days and months	10	The student will select the correctly capitalized words (such as days of the week, months of the year, and holidays) for the blanks in a sentence.	The teacher says: Fill in the bubble next to the one that is capitalized correctly. We are going skating on ___ ___ ___. o Saturday or Sunday o saturday or Sunday o saturday or sunday o Saturday or sunday
VII. Punctuation	30		
A. Periods and question marks	10	The student will select the word with the correct punctuation (involving abbreviations and the final word in a sentence) for the blank in a sentence.	The teacher says: Fill in the bubble next to the one with the correct punctuation mark. Today is the first day of ___ o school o school. o school, o school?
B. Commas	10	The student will select the word with the correct punctuation (involving commas in dates and items in a series) for the blank in a sentence.	The teacher says: Fill in the bubble next to the one with the correct punctuation mark. We planted ___ trees, and bushes. o flowers' o flowers o flowers. o flowers,
C. Apostrophes	10	The student will select the correctly punctuated word (involving apostrophes in contractions and singular possessives) for the blank in a sentence.	The teacher says: Fill in the bubble next to the one with the correct punctuation mark. Mary ___ stay for dinner. o can't o cant o ca'nt o ca,nt
VIII. Spelling	69		
A. Predictable words	39	The student will (1) write the word, and (2) select the letter(s) needed to spell a predictable word correctly.	The teacher says: Write out the word with the missing letters on the dotted line. (Pause.) Now choose the letter or letters needed to spell the word correctly, and fill in the bubble next to the one you choose. I like to climb tr__s. [ ] o ee o ea o ie o ei

Skill Areas Assessed in Written Language, *Survey of Basic Skills: Grade 3* (Continued)

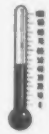
Skill Area	*Number of Items*	*Description of Skill Area*	*Illustrative Test Question*
B. Words with suffixes	16	The student will (1) write the word, and (2) select the letters needed to form a word with a predictably spelled suffix.	The teacher says: Write out the word with the missing letters on the dotted line. (Pause.) Now choose the letter or letters needed to spell the word correctly, and fill in the bubble next to the one you choose. I gave both bab__ their toys. ○ ys ○ eys ○ ees ○ es
C. Demons and homophones	14	The student will (1) write the word, and (2) select the letters needed to spell an unpredictable word correctly, or the student will select the correct homophone for a blank in a sentence.	The teacher says: Write out the word with the missing letters on the dotted line. (Pause.) Now choose the letter or letters needed to spell the word correctly, and fill in the bubble next to the one you choose. I only hit him __nce. ○ oo ○ wu ○ o ○ wo The teacher says: Fill in the bubble next to the one which completes the sentence correctly. __ not very hot today. ○ Its ○ It's

Skill Areas Assessed in Mathematics, *Survey of Basic Skills: Grade 3*

Skill Area	*Number of Items*	*Description of Skill Area*	*Illustrative Test Question*
I. Counting and Place Value	**45**		
A. Skills	30	The student will identify ordinal positions; identify the word form of a standard numeral; count by 1s, 2s, 5s, or 100s; recognize equivalent numbers in standard numeral form and in expanded notation; and find the place value of a given digit in a numeral, or identify the digit of a given place value.	600 + 10 + 3 = o 316 o 600103 o 60013 o 613 3204 The number 4 is in the _____ place. o ones o tens o hundreds o thousands
B. Applications	15	The student will apply his or her knowledge of place value skills in the context of word problems.	Mary is the sixth person in line. You are behind Mary. You are the _____ person in line. o first o fifth o sixth o seventh
II. Operations	**155**		
A. Basic facts	25	The student will identify basic facts in addition, subtraction, multiplication, and division.	7 + 5 o 2 o 11 o 12 o 13 3)15 o 315 o 18 o 12 o 5
B. Addition	30	The student will identify the sum of two or three numbers.	12 8 + 23 o 16 o 33 o 43 o 62 165 + 308 o 473 o 472 o 464 o 437
C. Subtraction	30	The student will identify the difference of two numbers.	79 − 32 o 46 o 47 o 65 o 111

Skill Area	*Number of Items*	*Description of Skill Area*	*Illustrative Test Question*
			417 − 283 o 134 o 200 o 234 o 274
D. Multiplication	30	The student will identify the product of two or three numbers.	45 × 2 o 50 o 80 o 90 o 180 2 × 1 × 4 = o 6 o 7 o 8 o 24
E. Applications	40		
1. Basic facts	13	The student will apply his or her knowledge of basic facts in the context of word problems.	Bob has 3 pencils. Robbie has 8 pencils. How many more pencils does Robbie have than Bob? o 4 o 5 o 11 o 24
2. Addition/subtraction	15	The student will apply his or her knowledge of addition/subtraction skills in the context of word problems.	Paul has 246 stamps. Lisa has 408 stamps. How many stamps do Paul and Lisa have? o 644 o 652 o 654 o 6414
3. Multiplication	12	The student will apply his or her knowledge of multiplication skills in the context of word problems.	There are 4 trees. There are 86 birds on each tree. How many birds are there? o 90 o 272 o 324 o 344
III. Nature of Numbers and Properties	**45**		
A. Properties and relationships	15	The student will identify counting patterns, use the commutative and associative properties, multiply a number by 0, compare numbers with the signs <, >, and =, and recognize even and odd numbers.	33 × 0 = o 0 o 30 o 33 o 330 10 + 61 + 1 is the same as o 0 + 17 + 11 o 7 + 10 + 21 o 10 × 61 × 1 o 0 + 16 + 11

Skill Areas Assessed in Mathematics, *Survey of Basic Skills: Grade 3* (Continued)

Skill Area	*Number of Items*	*Description of Skill Area*	*Illustrative Test Question*
			Which is an even number? o 9 o 7 o 5 o 4
B. Money and fractions	15	The student will identify names of coins, recognize the value of one or several coins, identify decimal notation from words for money, identify equivalent coins for cent notation of money, and identify fractional parts of geometric figures.	How much is this? o 80¢ o 75¢ o 60¢ o 15¢
C. Applications	15	The student will apply his or her knowledge of nature of numbers and properties in the context of word problems.	George marked the score chart like this: (12) 13 (14) 15 (16) 17 (18) 19 (20) 21 (22) 23 (24) 25 (26) 27 (28) 29 (30) 31 The chart shows counting by o 2 o 3 o 5 o 7
IV. Geometry	**50**		
A. Skills	20	The student will identify two- and three-dimensional basic shapes, parallel lines, line segments, right angles, diagonals of quadrilaterals, diameters of circles, and congruent figures.	This shape is a o square o circle o rectangle o triangle
B. Applications	10	The student will identify coordinates of points of a coordinate grid and apply his or her knowledge of geometric skills in the context of word problems.	This is the Smith's tent. Which is the same shape and size as the shaded part of the tent? o o o o
V. Measurement	**40**		
A. Linear measures	15	The student will measure objects linearly using nonstandard or standard units, estimate lengths of objects or parts of the body, change one standard unit to another within the system, identify the most appropriate unit of length, and determine the perimeter of a polygon.	How many inches in a yard? o 36 o 24 o 12 o 6
B. Other measures	15	The student will identify the most appropriate unit of mass, determine the area of a polygon, identify the correct time, identify the correct order of days of the week and months of the year, read and interpret a calendar and a thermometer, determine the volume of a three-dimensional object in nonstandard units, and determine the heavier of two masses.	The temperature is o 35 degrees o 40 degrees o 45 degrees o 50 degrees 

Skill Area	*Number of Items*	*Description of Skill Area*	*Illustrative Test Question*
C. Applications	10	The student will apply his or her knowledge of measurement skills in the context of word problems.	 What time will it be in 3 hours? o 3:15 o 2:45 o 3:45 o 4:45
VI. Patterns and Graphs	**30**		
A. Skills	15	The student will identify the function rule, complete a function table, identify a geometric pattern, and recognize a number pattern.	 In the table above, the rule is o Add 2 o Add 3 o Subtract 3 o Add 4
B. Applications	15	The student will apply his or her knowledge of patterns and graphs in the context of word problems.	Look at the graph. Who is the oldest? o Mary o Greg o Patty o Don
VII. Analysis and Models	15	The student will read a story and find the facts in the story, missing information, or the question being asked, and the student will match a picture model with a mathematical sentence or a statement.	Mary has 3 dolls. Sue has 2 trucks. Bill has 1 doll. How many dolls are there? What facts will help you answer the question? o 3 dolls and 2 trucks o 2 trucks and 1 doll o 3 dolls o 3 dolls and 1 doll 10 balloons 5 students How many balloons for each student? How can you find the answer? o 10 + 5 = 15 o 10 − 5 = 5 o 10 × 5 = 50 o 10 ÷ 5 = 2